INDEXATION OF FINANCIAL ASSETS

An Islamic Evaluation

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FOREWORD

Inflation is perhaps the foremost problem which has posed a formidable difficulty in introducing an interest-free economy. The rapidly decreasing value of currency in the third world in general, and the Muslim countries in particular, has acquired an almost unprecedented proportion during the last few decades. The cumulative effect of the economic policies adopted in different Muslim countries under the influence of the model of the capitalistic free market economy coupled with the exaggerated craving to speedily reach the economic, standards of the developed countries and to speedily acquire the gadgets in vogue there, has contributed to a spectacular, continuous decrease in the purchasing power of money in the third world countries. Some equity-based transactions were put forth in different Muslim countries as an Islamic alternative to interest-based practices in the fields of banking and investment. However, not much significant progress has been made because of the failure of Muslim economists to come out with viable solutions to the problem of inflation and to a large extent because of the lack of will to venture with any new experiment.

During the past decades, indexation has been suggested as a viable solution to the problem of inflation in many countries of the world. Some Muslim scholars have also felt persuaded to support this solution on both economic and Islamic grounds. Although the available literature on the indexation of loans,

wages and financial assets from an Islamic point of view is very scanty, the ideas on the subject are getting crystallized. Several workshops and symposia have so far been held on the subject in different parts of the world as a result of which considerable material has become available to help one form an opinion on the question from an Islamic viewpoint.

The Islamic scholars have generally been opposed to indexation of financial loans. Arguments and counter-arguments have been put forth on the subject, requiring a deeper study by the scholars who combine knowledge of Economics with that of Islamic Studies, especially Islamic *Fiqh*. It is heartening that Dr. S. M. Hasanuz Zaman has come out with a clear and stimulating exposition of the problem of indexation from an Islamic perspective. Being an economist, a banker, and an Islamic scholar, he is exceptionally suited to undertake this task. In the present work, Dr. Zaman has made a critical survey of the experiment of indexation in different countries during the last fifty years or so. He has examined the question of indexation from an economic point of view along with evaluating it from an Islamic perspective. He has discussed both the arguments advanced in favour as well as those against indexation and has reached the conclusion that indexation is neither economically beneficial, nor rationally justified, nor Islamically acceptable.

The monograph is being published in order to stimulate further thinking on the subject, as part of the effort to develop the blue-print of an alternative economic order conforming to Islamic values and principles. Hopefully the present work will provide a basis with the help of which other scholars will further thrash out the question under discussion, and ultimately help Islamic scholarship to arrive at a definitive position.

Mahmood Ahmad Ghazi

PREFACE

While deliberating over the alternatives to interest, the Panel of Economists and Bankers set up by the Council of Islamic Ideology, Government of Pakistan, considered for the first time the proposal of indexation of bank deposits and advances. The Panel concluded its deliberations in the following words:

> Under a system of indexation the liability of a borrower to the banking system would be adjusted in money terms to reflect the change in the value of money, as measured by a price index, during the period the borrowing remained outstanding. Lending by banks on this basis would enable them to compensate the depositors for the change in the value of money. Indexation may constitute a favourable factor for the growth of savings in an inflationary situation by preserving the real value of money savings. But indexation on the side of bank advances is likely to create a number of problems. It is well-known that inflation affects profitability in various sectors in different ways. Recent experience in a number of developed and developing countries showed that profits in the commerce sector boomed in an inflationary situation while profits in the industrial sector did not rise in consonance with the rise in the general price level. Indexation of bank advances under such circumstances can greatly hurt productive activity. Agricultural sector

> is also likely to suffer because agricultural prices are often controlled by the Government of determined by international demand and supply factors. If the increase in the prices of agricultural products is less than the rise in the general price level, indexation of bank advances will place the agricultural sector in a disadvantageous position compared to sectors where price rise is equal to or more than the rise in the general price level. *(Report of the Panel of Economists and Bankers on the Elimination of Interest from the Economy*, Karachi, 1980, p. 6).

The Council of Islamic Ideology rejected the proposal on *Sharī'ah* grounds. Its argument was that in the *Sharī'ah* the basic principle is that the same quantity (units) should be returned as was borrowed even though the price of the commodity may have changed in the meantime. *(Report of the Council of Islamic Ideology on the Elimination of Interest from the Economy*, Karachi, 1980, p. 13).

This summary disposal of indexation perhapes could not convince a number of Muslim scholars and, in fact, in regard to a few points, the Council's views were misunderstood. The question of indexation continues to be debated. In 1989 an honourable judge of the Sindh High Court decreed for repaying the loan indexed to its purchasing power. (For relevant portions of the Decree see Excursus 1). In January, 1991 the honourable Federal Shariat Court circulated a questionnaire among its jurisconsults which involved, *inter alia*, the subject of indexation.

In view of the continuing importance of the question of indexation I decided to bring together and revise the work I had done on the subject. Parts of a paper were published in *The Journal of Research in Islamic Economics*, (vol. 2, no. 2), Jeddah. Another paper was presented in the Workshop on Indexation sponsored by Islamic Development Bank at Jeddah in April, 1987. These papers, with revisions and improvements,

and alongwith some other writings of mine, are being integrated into a monograph.

The present work attempts to examine the issue of indexation not only from the viewpoint of the *Sharī'ah* but also in terms of justice and equity and the economic well-being of all sections of society.

In the end, I would like to express my gratitude to my friends who persuaded and encouraged me to contribute to the subject. I am highly grateful to Dr. Ziauddin Ahmad, formerly Deputy Governor, State Bank of Pakistan, who very graciously provided me useful material on indexation that I have used liberally in tracing the history and examining the merits and demerits of indexation. My thanks are also due to Dr. Zafar Ishaq Ansari who very carefully and thoroughly reviewed the draft and made valuable suggestions for improvement.

S. M. Hasanuz Zaman

INTRODUCTION

The decreasing purchasing power of money has been one of the most intriguing problems not only for economists but also for different groups of people — the savers, the lenders, and the consumers. The increase in inflationary tendency that engulfed the world economy after World War II and did so alarmingly during the seventies seems now to have taken a trend. The failure on the part of economists to arrest this trend has not only convinced the economists of its weird coexistence with economic development and progress, but more than that, they have brought in a number of arguments to justify its existence to a certain limit and to extol its role as a positive one on conomic growth.

The controversy about determining a reasonable limit for inflation, or an acceptable rate of increase in price may, possibly, end up in reconciliation with any rate of inflation. In fact all such talk reminds one of the erstwhile controversy concerning a 'fair rate' or a 'just rate of interest' as distinguished from usury. A stage has arrived when many countries have institutionalized it in the form of indexation by linking the loans and wages to cost of living or consumer prices. To-day when the idea of indexation hinted at by Marshall, Jevons and Keynes is being sold by top modern economists such as Friedman, the mention of the idea of indexation in the *Report of the Council of Islamic Ideology on the Elimination of Interest in Pakistan*, even though with a note of disapproval, is indicative of the influence

of the protagonists of indexation even in the circle of Muslim economists and bankers. Indeed some Muslim scholars have come forward to argue for it, basing their case on arguments derived from the basic sources of the *Sharī'ah*, while others have expressed appreciation for it with some reservations. (See Abdul Mannan, "Indexation in an Islamic Economy: Problems and Possibilities", *The Journal of Development Studies*, Peshawar, 1981, pp. 41-50. See also Syed Nawab Haider Naqvi, *The Agenda for Islamic Economic Reform*, Islamabad, 1980, p. 22; see also his *Ethics and Economics: an Islamic Synthesis*, Leicester, 1981. Naqvi supports indexation without arguing for its validity, and does so on ground of the *Sharī'ah*). The writer is also personally aware of some other important persons who are appreciative of this idea. It seems necessary, therefore, to carefully examine the idea purely from the point of view of the *Sharī'ah*.

Before we proceed further in this study it seems necessary to distingusish between indexation of payments like wages, salaries, pensions and social welfare benefits on one hand, and indexation of loans on the other. For in Islam, payments are governed by two different sets of principles. Payment of wages, etc., are governed by a number of economic, social and physical factors whereas the repayment of loans is governed by a set rules of the *Sharī'ah*. The following study is an attempt to study the position of the *Sharī'ah* on indexation of loans.

ONE

TECHNIQUES AND HISTORY OF INDEXATION

There is no denying the fact that, owing to inflation, money has failed to adequately fulfil two of its traditional roles as a store of value and as a dependable standard for deferred payments. It is due to inflation that the chances of achieving an improved and fast growth performance are reduced. It also leads to a loss of competitiveness in world markets, worsening the balance of trade and causing the exchange rate to depreciate. The distortions that are caused by inflation are, in some respects, and to some extent, removed by indexation which may be broadly defined as the linking of regular payments to an independent measure of value.

TECHNIQUES OF INDEXATION

Domestic indexation may be roughly classified into advance and *ex post facto* adjustments (or pre-fixed and post-fixed indexation). In some countries, for instance Brazil, both kinds of adjustments are made. In the advance adjustment, inflationary fluctuations in the coming year (or projected inflation) are estimated in terms of percentage, and the rate is used as an adjustment coefficient. Fixed deposits, bills of exchange,

debentures and convertible debentures are adjusted according to this rate. Here both the principal and the interest are adjusted. This adjustment is understood to have served to encourage savings to a considerable extent and to stimulate the floating of loans on a long term basis.

With regard to the *ex post facto* adjustment, an organization is entrusted with the task of checking up on the cost of living and price indices and the wholesale price indices prepared by this organization form the basis for the determination of the adjustment coefficient. The *ex post facto* adjustment coefficients are applied mainly to the government bonds. They are also applicable to the taxes in arrear and the contribution by entrepreneurs to social security. Adjustment coefficients are reviewed every month or every three months.[1]

The next step concerns the adjustment of corporate accounts. Entrepreneurs are obligated to reassess property in their possession. The appraisal is optional for operating funds but mandatory for fixed assets.[2]

A BRIEF HISTORY OF INDEXATION

It is difficult to trace the history of the idea of indexation. Although the recurring price-increases have been a known phenomenon ever since the introduction of money, the early price fluctuations were largely the effect of short term disequilibrium between demand and supply. Studies on increase in prices as a secular trend were made possible after complete data necessary for analysis became available during the last two centuries.

That Massachusetts had an issue of bonds based on a few commodities as early as in 1742[3] is simply suggestive of an exceptional precedent without any follow up during the next 172 years. Theoretically, however, renowned economists like Jevons in the year 1875 and Alfred Marshall in 1886[4] advocated the use of a standard unit of purchasing power in contracts for deferred payments and the latter reaffirmed this view in 1911. Keynes also advocated the issue of treasury bonds by the government of

U.K., of which the capital and interest would be paid not in a fixed amount of sterling but in an amount of sterling which has a fixed commodity value as indicated by an index number.[5] According to Friedman, the idea of an escalator clause, a variant of indexation, dates back to the year 1707.[6]

INDEXATION OF WAGES

In the twentieth century Britain was perhaps the pioneer of wage indexation (which she used extensively between 1914 and 1922) followed by Australia which adopted it relatively early, indexing basic wages from 1921 to 1953 (and in a a modified form in 1961). In Belgium, wage escalator clauses have been used in the mining industry since 1920.[8] In Norway, industrial wages have been indexed since 1921 and agricultural wages since early 1940s.[9] In 1941, a mechanism was devised in Palestine to smooth the functioning of the labour market by paying a Cost of Living Allowance every three months.[10] In Belgium, nearly all wage agreements since 1948 have included cost of living adjustment clauses, generally after every three years. Indexation also extends to social security and is commonly written into rent agreements.[11] Denmark has been linking all its wage contracts since the Second World War.[12] Indexing in USA was introduced in 1948 after a wage freeze during the Second World War. The US Government has adopted escalation for social security payments, retirement benefits to the Federal employees, wages of post office employees, and some other items. Taxes that are expressed as fixed percentages of price or other value-base are automatically escalated.[13] More than five millon US workers are covered by Union contracts with automatic escalator clauses. Such clauses also cover a large number of rental contracts of business premises, percentages of royalty payments, automatic insurance policies for repairing actual damage and fire insurance policies, etc.[14] France introduced indexation clauses in 1948 but discontinued the same in 1958 whereafter only the national guaranteed minimum wage in industry and agriculture was directly linked to change in the cost of living. However, it is again on its way back.[15] In Italy, the government workers have

been covered since 1959.[16] Holland's system of wage bargaining (introduced in 1965) is unique in Europe. Governments have been permanently vested with the power to veto increase in wages. Index-linking of wage agreements came in as part of the process of relaxing the official grip, not of tightening it. Wages were kept in a straitjacket for ten years after World War II. Index-linking was cautiously introduced for a selected number of one-year agreements in 1965, then extended to the majority of collective agreements in 1969. The 1974 version of index-linking includes a six-monthly cost of living adjustment, above a low threshold, on a one-for-one basis, but with a minimum level of compensation that builds an element of redistribution into the mechanism.[17].

INDEXATION OF CAPITAL

In addition to indexation of wages a large number of countries have indexed capital, viz. bonds, deposits, mortgages, loans and rents. In this respect Finland is the first country to have resorted to index capital on an extensive scale. It first issued indexed government bonds in 1945 together with linking of capital payments to wholesale price index. In 1953 some private bonds issues were tied to the dollar exchange rate or export price. Finnish financial institutions also issued indexed bonds. In 1955 certain types of time deposits were also indexed to consumer prices. Such deposits were to be for a specified minimum amount and had to be made for a fixed term of one year.[18]

In Palestine, the linkage of financial assets was first introduced by the Jewish Agency by linking the national loans to the U.S. dollar during the last days of the British Mandate. In 1950, Israel issued bonds linked to the official foreign-exchange rate to compensate the owners of foreign securities. From 1954 on the government had to offer either dollar or price-index linkages for its bond issues in order to make them acceptable to the public. The rest of the long and medium borrowers had to follow the government. The introduction of linkage in government borrowing inevitably raised the question of its

extension to government lending as well. In 1965, the government accepted the recommendation of a public committee, which it had set up, that linkage be required on all state credits extended for a period of two years or more. By the end of 1950s the acceptance of linkage in medium and long term financial contracts had become practically universal. Not only regular loans but also mortgages, life insurance, and savings deposits acquired some linkage clauses and their use extended even to credit bills. In general the two value standards used were the official exchange rate of U.S. dollar and the consumer price index (CPI). As a rule, both the principal and the interest were linked.[19]

History of some loose form of indexation in France which, like Finland, has now done away with indexation, dates back to 1925 when the government issues were tied to the rate of exchange. In 1956 the government issued bonds with interest tied to the level of industrial production but with a fixed redemption level.[20] Those bonds, issued by the nationalised industries, were often linked to the prices of the commodities: for example, the electric company issued the bonds linked to the average selling price of electricity and the railways issued bonds linked to the prices of third class tickets.[21] The government also issued a bond in 1956 with fixed interest but with redemption tied with change in the average value of French securities.[22] In most corporate issues of bonds the reference index was related to internal cost indexes or corporate profits.[23] In 1973 it issued two government securities: one tied to gold and the other paying a higher interest rate based on the EEC unit of account with the provision for gold link if the unit of account should be abolished.[24]

Among other countries which have indexed a single bond or had a limited range of agreement are Austria, Argentine, Iceland, Sweden, U.K. and U.S.A.[25]

Among the non-market economies Hungary and China have tried to introduce indexation on a limited scale. Hungary compensated for price and rent increases by administrative action

to adjust wages and other benefits.[26] In 1950, China introduced Parity Deposit Scheme under which deposits and loans were guaranteed in terms of four commodity units i.e., rice, cotton fabrics, peanut oil, and coal.[27]

BRAZIL — A CASE OF COMPREHENSIVE INDEXATION

Brazil is the only country which has been practicing the most comprehensive system of indexation. It would, therefore, seem worthwhile to give a detailed description of the background and actual operation of the institution. Under the pressures of rapid industrialization and the policies of populist governments, the rate of inflation during the 1940s and 1950s, rose to dangerous levels. Price increases which had averaged about 20 per cent a year during the 1950s, began to accelerate rapidly in 1959. Powerful trade unions negotiated successfully large wage adjustments; credit was granted liberally to accommodate higher costs, and the resulting wage-price spiral pushed inflation to over 80 per cent in 1963. As the government tried to control inflation, the distortion in relative prices also became more acute. Exports stagnated because of delays in adjusting the exchange rate; apartments were left empty as rent adjustments lagged; and electricity, telephone and other public services deteriorated as the charges of these services were kept artificially low. Interest rates, although nominally high, were negative in real terms, and savers sought protection by investing in real estate or transferring funds abroad. Finally, Brazil's public finances were seriously weakened because all charges for the public sector services and certain minor taxes were specific rather than *ad valorem*; moreover, tax-payers delayed payments to take advantage of the loss in purchasing power of the cruzeiro, the Brazilian currency.[28]

The regime which took power in April 1964 in Brazil was determined to slow down inflation. Hoping, however, to do so without causing a severe depression, it decided on 'gradualism', as opposed to a 'shock-treatment' approach in its

stabilization programme. Moreover, the regime was also determined to restore the market as a guide for the allocation of resources, and so the prices which had been artificially held down by the previous governments, such as public utility rates, were raised. This had an initial inflationary effect, which was called 'corrective inflation'. It was thus clear to the policy-makers that they would have to put up with high rates of inflation for some time to come. Indexing was, therefore, seen as a means of eliminating some of the distortions caused by inflation. In other words, the Brazilian authorities decided to 'live with inflation', although indexing was apparently conceived of as a temporary measure and not, as is often assumed, as a permanent way of life.[29]

A concept of indexing was first introduced in Brazil in 1951 in a limited and somewhat improvised way. From 1964 onwards, a series of laws instituted indexing in a large part of the economy. The first law, in July 1964, established indexing as obligatory for all fixed assets, permitted depreciation on the revalued base and gradually eliminated the ten pe: cent tax on revaluation. Indexing was applied to back taxes owed to the federal government to encourage their speedy payment. The same law also authorised the issue of a new series of federal government bonds called 'Readjustable National Treasury Obligations', which were bonds of one or two years' maturity whose principals were adjusted monthly according to the three-month moving average of the wholesale price index. (There was also a series of five-year bonds whose principals were readjusted every three months). The coefficients for adjustment of the principals were calculated on the basis of the wholesale price index, compiled by a semi-autonomous institute for economic studies. Another law created a National Housing Bank to provide mortgage loans. Both the bonds issued by this bank for financing and the loans it granted were indexed. A law regulated housing rents through a different type of index: rents were adjusted according to the minimum wage, which was itself set by the government. Rents which had been frozen were first allowed to

rise according to the government's corrective-inflation policy. In the following years additional laws were added to cover construction loans, non-residential rents, insurance, and back pay owed to employees. The principle of indexing was extended to a new series of forced savings.[30]

A 'capital markets law' was passed in July 1965. It contained wide-ranging provisions for the reform of Brazil's capital-market institutions, including various stimuli for the stock market, the long-term debt market, and the investment banks; also, the law included various provisions to bring down the short-term rate of interest. The indexing provisions included in the law applied to long-term corporate debt, a large range of time deposits, and the interest rates of medium-term instruments.[31]

The indexing used was 'post-fixed'. A series of regulations from 1965 to 1967 created a new concept to be applied to the short term market: 'pre-fixed indexing'. In 1970, the government pre-indexed short term credit notes of its own in addition to its long-term bonds.[32]

Since 1973, a new indexing scheme half-way between post and pre-indexing has been adopted for all credit instruments. The indexing coefficients are now calculated on a five-month basis, the moving average of inflation for the previous three months plus an official estimate for the next two months. In July 1974, this form of indexing was extended to the short-term credit sector, so that it now covers all Brazilian credit instruments.[33]

With the adoption of a 'crawling peg' exchange policy in late 1968 frequent small devaluation of the currency must be considered part of the overall indexing policy. It is a discretionary policy that can be based on factors other than Brazil's inflation relative to that of other countries. But the relative rate of inflation has been the principal determinant; hence it seems fair to regard the crawling-peg as part of the indexing policy.[34]

Unlike many other countries, Brazil has not indexed wages, although many wages are directly or indirectly fixed in the light of guidelines set down by the government. In 1965 a formula was introduced which based the increase in the nominal wage for the coming year on the anticipated rate of inflation. Another law in 1986 extended the use of the formula to wage disputes and added anticipated productivity increase as a factor in the formula. A further change in 1968 based the new nominal wage not on what it has been previously, but on what it would have been had the inflation and productivity increases that actually occurred been used to set it in the previous year. Since the principal factors in the formulas have always been anticipated rates of increase, and the government did the anticipating, wage increases in Brazil have largely been a matter of discretionary government policy and cannot really be said to have been indexed. The real purpose of the wage policy was to reduce inflationary pressures from this source. Indexing wages was not really practiced and the policy can be better described as wage control.[35]

Most prices of goods and services, though not indexed, are subject to some direct and indirect controls. Since 1968 the government has maintained a council, which acts as a watchdog on the prices of many items. If a price change is made in spite of its disapproval, it is likely that credit from the Bank of Brazil will no longer be available to the offending party.[36]

CONCLUSION

It would be seen from the above account that there is no uniformity in respect of the employment of indexation in different countries. A large number of countries have indexed wages, pensions and social security payments. Some countries have indexed a single bond while others have indexed different forms of investments. It is because of these differences that the techniques of indexation and the choice of index vary in different countries. The most common technique of indexation is linking wage or investment to consumer prices or cost of living. A

number of countries make advance adjustments with prices while some others practice *ex post facto* adjustments. The period of adjustment ranges from one month to one year; in some cases even three years. In the advance adjustment, inflationary fluctuations in the next year are estimated in terms of percentage, and the rate is used as an adjustment coefficient. Fixed deposits, bills of exchange, debentures and convertible debentures are adjusted according to this rate. Here both the principal and the interest are adjusted. With regard to the *ex-post facto* adjustments, the wholesale price indices form the basis for determination of co-efficient. The *ex post facto* adjustment co-efficients are applied mainly to the national bonds. They are also applicable to the taxes in arrears and the contributions made by the entrepreneurs to social security. Adjustment co-efficients are reviewed periodically.

TWO

THE ECONOMIC DEBATE ON INDEXATION

In chapter 1 we have presented an introduction to the techniques of indexation and also given a brief historical account of indexation in which we have mentioned how it was linked, first to wages, pensions, social security payments, etc., and then to capital, viz. bonds, deposits, mortgages, loans and rents, etc. With a view to examine the economic significance of indexation it would be useful to reproduce the pros and cons of the techniques as pointed out by economists in the course of their discussion of the subject.

ARGUMENTS FOR INDEXATION

We shall first consider the arguments usually marshalled in support of indexation, followed by those opposed to it.

(1) It has been mentioned earlier that in periods of inflation money has failed to perform two of its most important functions — as the store of value and the standard of

deferred payments. It is claimed that these shortcomings can be removed by introducing indexation.

(2) Those who advocate indexation on the ground that it compensates for inflation have seen it as an instrument which would help to secure economic stability, economic growth, and equity in the distribution of capital.[1]

For the purpose of discussing its operation from these points of view it is assumed that compensation for inflation is introduced without significant changes in the nominal rate of interest from what it would otherwise have been.[2] Argument in favour of inflation-compensation as contributing to stability might be based upon its effect on savings. It is frequently suggested that inflation-compensation would increase savings by way of interest effect.[3]

Support for inflation-compensation may also be derived from the consideration of growth. Growth will be expected if the device resulted in an increase in the share of investment in the national income or through its structural effect it favoured the choice of more productive investments. Marshall gave much weight to this structural effect in his advocacy of inflation-compensation.[4]

It might also be that the introduction of inflation-compensation would affect stability and growth by way of its impact on the distribution of income and capital although, in view of its complex nature, it is very difficult to foresee this effect on the economy as a whole.[5]

(3) Advocating the use of indexation in the context of US economy, Milton Friedman visualises the following merits to ensue from it. "Indexation would temper some of the hardships and distortions that now follow from a drop in the rate of inflation. Employers would not be

stuck with excessively high wage increases under existing union contracts because wage increases would moderate as inflation recedes. Borrowers would not be stuck with excessively high interest costs, for the rates on outstanding loans would moderate as inflation recedes. Indexation would also partly counteract the tendency of businesses to defer capital investment once total spending begins to decline — there would be less reason to wait in expectation of lower prices and lower interest rates. Businesses would be able to borrow funds or enter into construction contracts knowing that interest rates and contract prices could be adjusted later on in accord with index of prices. Most important, indexation would shorten the time it takes for a reduction in the rate of growth of total spending to have its full effect in reducing the rate of inflation".[6]

(4) The absence of index-linking may frustrate all forms of forward planning and contracts in a period of great uncertainty about the future rate of inflation. This situation may have a harmful effect on the stability of the economy.[7]

(5) One of the effects of indexation would be that it may improve the allocation of investment by eliminating the factor of mere luck or skill in forecasting future prices of investment funds and inputs and outputs, and by reducing the effort that must be spent on such prices. This may improve the performance of the economy by sparing the resources for more productive uses.[8]

(6) Indexation imposes discipline on the growth of public spending by eliminating the inflation-generated component of government revenue. Through this, it may significantly reduce the tendency of the government sector to grow more rapidly than the rest of the economy during periods of high inflation. It is also likely to

increase the transparency of the tax system and help maintain the pattern of tax distribution.[9]

ARGUMENTS AGAINST INDEXATION

It will be seen from the foregoing that the merits attributed to indexation are generally of a theoretical nature. As against it, the opponents of this approach have based their arguments partly on theory but, to a great extent, on the basis of the experience gained in various countries of the world. Some of these arguments pertain to partial indexation while others refer to comprehensive indexation. These arguments are summarised as follows:

(1) Theoretically, the proposal for the use of purchasing power guarantee in loan contracts is based directly on the observed uncertainty about the future value of money. The whole subject would become irrelevant if it could be established that the value of money, i.e. the general price level, was definitively stabilised. All practical proposals are therefore, predicated on the assumption that for the country in question the future general price movements are subject to grave uncertainty.

(2) By insulating a group of people from the ravages of inflation, a purchasing power clause in government securities would reduce the political opposition to inflation and thereby tend to perpetuate the evil.[10]

(3) Expressing the above point in a different way, the introduction of an index clause at a time of rising prices, unaccompanied by other measures, might well be considered to signify that the government had relaxed in its effort to control the problem. This would also imply a defeatist attitude towards the problem of inflation and is likely to weaken the public support for the fight against rising prices.[11]

(4) In some countries there may be a problem of confidence in the index, and doubts about its reliability might hinder the sales of government securities containing an index clause. In some countries there may indeed be no reliable index available. However, if the index is made available and is considered adequate, there necessarily remains the possibility that it would be distorted by price control and subsidy measures concentrated on certain items included in it. Another way of manipulating prices may be the levy of heavy indirect taxes on the items not covered by index, or items which carry only a small weight, thus raising the cost of living without influencing price index. This is done in Israel.[12] Another way of juggling of the index may be through providing subsidies and through artificial cheapening of imports to keep the index down. All these practices are resorted to in Israel, Finland, Norway, the United Kingdom and Brazil.[13]

(5) Many practical problems will arise because of the double standard implied in indexation—the existence of one form of money, legal tender currency, side by side with another monetary unit, the unit of purchasing power used in loan contracts. This double standard will necessarily create problems of three types: first, the problem of establishing a dividing line beyond which the purchasing power cannot be used; second, the problem arising from the pure accounting difficulty of converting purchasing power clauses to money terms for payments and for balance sheet purposes; third, the problem for banks and, to some extent, for other firms, to obtain a balance of assets and liabilities in the new form to avoid gambling on the future value of money.[14]

(6) It is most important to remember that in all the countries except Brazil it is partial indexation that was introduced. Finland has indexed its wages and investment rather more liberally than the remaining countries. At home, partial indexation can always protect real living standards

of those to whom it is applied, but only at the expense of those who are not protected. In the countries which have indexed bonds the effects of indexing seem limited to diversion of savings when interest rates were higher. Indexing itself had no identifiable effect. Indexing pensions has not apparently reduced savings. Wage indexing, however, seems to have a slight association with steady investment in Finland, Belgium, the Netherlands and Norway.[15] Partial indexing necessarily implies an assumption that some income should be less subject to risks of change than others.[16] In cases where capital or investment is indexed, the tendency of indexation in practice seems to have been to cause an improvement in the return on capital in relation to that of labour. This appears actually to have happened in Argentina, Brazil, France, Italy, Sweden, and the United Kingdom; and the successful opposition of the trade unions to its wider adoption in Austria has been due to fears of a similar outcome there. In Chile, Canada, Colombia, Iceland, the Irish Republic and New Zealand there is too little evidence to claim whether any changes are associated with indexing. In the remaining countries there has been no apparent effect.[17]

(7) The co-existence of indexed and non-indexed financial assets has led to a considerable number of problems, and it is particularly so when the rate of inflation varies significantly. It will be found that private savers will draw funds from non-indexed accounts for the purchase of indexed bonds as has happened in Brazil.[18]

(8) Some observers are of the view that indexing has not had a major identifiable effect on the economy in any of the countries. It does not appear to have had a significant effect on inflation either way. Sometimes it has been part of an incomes policy that has changed relative incomes but in itself it has had no more than a marginal redistributive influence which seems if anything to have

favoured holders of capital rather than labour, with little effect on those people who are receiving pensions or other welfare benefits. It does not seem to have had any consistent influence on the current account of the balance of payments or on external capital flows. Nor does it appear to have affected private saving, although in combination with other policies, general indexation may have encouraged economic growth by reducing the element of uncertainty for potential investors.[19]

(9) The use of cost of living index tends to transfer the whole burden of monetary depreciation to the shoulders of the debtors.

(10) The government, in an attempt to reduce the balance of payments deficit, may try to raise the price of foreign exchange thereby causing an increase in prices. This was done by Israel.[20]

(11) As regards comprehensive indexation its enforcement is possible only if the rate of inflation is much higher than the market rate of interest so that the savers get a poor or even a negative return on their money. In case the rate of inflation is less than the market rate of interest, there is obviously no case for indexation. Yet, it is generally believed that the good time to adopt indexation is when the restoration of price stability over a sustained period of time is needed.[21] Now, this condition of price stability for a sustained period would itself eliminate the necessity of indexation.

(12) At the theoretical plane indexation is all very well as a means of protecting certain important groups from changes in the value of money arising from changes on the money side, but adverse effects on the goods side are ignored. Suppose that in a closed economy there is an earthquake or a drought which causes the T in the old Fisher equation to shrink against a constant M; in that case, the result will surely be a rise in price caused by

the falling off in the flow of goods. Indeed, the reflection of such falling off in these circumstances is a condition of equilibrium. In such circumstances, an index which ties money incomes to a price index is a positively destabilizing factor; it is a recipe for built-in inflation.[22]

(13) In a country like Brazil there has been a tendency to keep the estimated rate of inflation at a lower level so that the rise in real wages remains lower than the increase in general income. This is possible only under regimentation as exists in Brazil. In the free world, indexation cannot prevent strong trade unions with the power to blackmail the community using that power to force up their members' real incomes at everybody else's expense.[23]

(14) A very strong argument that is brought forward in support of indexation is its favourable effect on the distribution of income. But it should be seen that the effect of distribution of incomes depends upon the basket of items that are included in the index. Incomes, wages and salaries are generally nowhere fully compensated for fall in the purchasing power of money. In practice the tendency of indexation seems to have been to improve the return to capital in relation to that to labour.[24]

(15) Comprehensive indexation does not neutralize inflation because indexation schemes have inevitable imperfections which are not limited to the penalty imposed on hand to hand currency. In particular all feasible indexation schemes within the domestic currency system inevitably involve a lag between the period for which a change in the price level is observable and the period in which the price level adjustment is applied to the transaction. This lag — one of the inevitable imperfections, carrying the inflation of a period over into the next — develops because the change in the general price level of the

period in which payment is made cannot be known at the time of the payment: the transactions of the period determine the simultaneous movements of the general price level. Compensation for the inflation of a preceding period is not the same thing as compensation for the inflation determining the real value of the indexed payment. Indexation cannot neutralize inflation the way in which simple arguments favouring indexation often suggest.[25]

(16) Brazil's experience gives strong support to the view that the removal of distortions caused by inflation is essential if a high rate of economic growth is to be achieved. In particular, where economic development has high priority, the economic variables that are important to encourage saving, investment, and exports cannot be allowed to lag behind general price increases. The Brazilian case does not, however, conclusively establish that widespread indexing is the most appropriate way of achieving this goal. Rather, it seems to indicate that discretionary action by economic managers was the main element in Brazil's success, and that indexing was highly selective, flexible and was subservient to general policy considerations.[26]

(17) Effective and meaningful indexation would call for an effective government control over prices, wages, financial institutions and investment opportunities. It would also require a very basic role of the government in determining the basket of commodities that are to be included in the index.[27] Moreover, since in a comprehensive indexation system the government is a major borrower and wage payer, it is not only in a position to manipulate the quality of the basket but also the prices. This manipulation can be enforced only under regimentation as exists in Brazil.

(18) While considering the relationship between enhancement of pay and increase in price, there had been a tendency in Brazil to keep estimated rates of inflation at lower levels. According to a study, the rise in real wages in Brazil is much lower than the increase in general income. In a way it might be said that a considerably deliberate income policy was instituted in the name of indexation, and this was feasible only under a military regime empowered to exercise absolute control.[28] This should also be noted that indexing in Brazil has been applied to real assets, credit instruments, public service, prices, rentals and price of foreign exchange, but not to real incomes of wage earners. Thus it has not been of much help in countering the trend towards increased concentration of the distribution of income. The distributional effect which indexing has had in Brazil is essentially between creditors and debtors, not between labour and capital.[29]

In other countries too the introduction of indexation of wage, and similar measures do not necessarily mean that thereafter the market forces are allowed full play. The government can abandon it if it is dissatisfied with it, as has happened in Australia, Finland and France where import prices made it impossible to maintain real incomes any longer.[30]

(19) It is generally observed that the government juggles this index by subsidies and artificially lowered prices of imports to keep the index down. Similarly, indirect taxes play a significant role in the movement of retail prices. The deliberation as to which indirect taxes to impose and on which commodities are influenced by the weight of the latter in the cost of living index basket. As a result the government throws the main weight of indirect taxes on those groups of products that are not represented in the basket or that carry only a small weight. Similarly, the government also carries out *de facto* devaluation by

creating multiple exchange rates of an unofficial nature; the terms of the value-pegging contracts usually provide only for changes in the official exchange rate.[31] The countries in which subsidies, controls, and indirect taxes have been used to regulate the index include Norway, Finland, Israel and the U.K. The most extensive manipulation is, however, practiced in Brazil where the main object has been to alter the distribution of income from labour to capital and so to promote development by reviving capital market. The wholesale index is based only on ninety-two products and its weight is not representative of the average family's expenditure. In almost all the countries where the public sector wages are occasionally indexed, wages are linked to prices, but the adjustment is not proportionate except in the U.K. and the U.S.A. In Italy alone the tendency has been to overcompensate.[32]

INDEXATION IN INTERNATIONAL TRADE

Indexation covering all forms of income also cannot provide a defence against external events which limit or reduce the possible growth of total real income. The technique of indexation in foreign trade and payments would, according to economists, lead to a large number of problems. These are:

(1) How would inflation in the advanced countries be measured? Would the measure be of the change in their overall domestic prices or a measure of the change in their general export prices or a measure of their export prices only of the items exported to the third world.

(2) How would weights be assigned to the various advanced countries and to the various items that might figure in an index?

(3) Which items of export from the third world would qualify for inclusion and what would be their weightage?

(4) How would the actual corrections for inflation be made?

(5) Would there be a process of mutual consultation with prices being corrected every few months or would there be an adjustment at the end of the year in the fashion of the clearing union?

(6) Who would do the calculations that are acceptable to everyone?

Leaving aside the purely administrative problems that an international system of indexation would create (and these should not be minimized), the question may be asked whether indexation, by overcoming the fear of future price increases, reduces the pressure for further price increases or does it not equally engender a feeling of comfort whereby commitment to financial discipline, essential even in an index-linked regime of prices, gets gradually eroded. These are not trivial matters and there are no satisfactory answers to them. On a somewhat more abstract level indexation is bound to create problems in the crucial area of structural changes in the world economy. It would seem that short-term advantages that indexation would bring about would lead to rigidity in the long run. Indexation would make it impossible for the world system of relative prices to function properly. Current scarcities and gluts would get frozen for a period of time and the incentives for innovation would disappear. If price changes emanating from the natural phenomena were to be institutionalized in indexation, this would itself contribute to further inflation. Future planning would become difficult. The future earnings of a country would depend upon the rate of inflation in the advanced countries which is beyond its control.[33]

It might not be wrong to suggest that as compared to overcoming inflation, which is itself a highly complex phenomenon and where all kinds of solutions have already been tried with relatively unimpressive success, it would be much more difficult and complicated to devise and operate indexation. As to its chances of success one should also be inclined to be

skeptical. According to some economists it is a recipe for built-in inflation.[34] According to a Finance Minister of Brazil "whatever use escalator clauses may have from the point of view of avoiding long term distortions, they always create an automatic mechanism of inflationary feed-back".[35] In short, indexation would mean living with inflation.[36]

THREE

INFLATION AND THE ISLAMIC LAW OF REPAYMENTS

We have already examined, in the previous chapter, the main arguments both in support of and opposition to indexation by contemporary economists. In the ultimate analysis indexation would mean that someone has to indemnify the damage caused to the purchasing power of money or for decrease in its value. The burden of payment of this indemnity will be borne by the government, the employer, the borrower or the banker. In order to examine whether such a payment by any of these parties is justifiable from an Islamic viewpoint, we shall have to apply the Islamic law of compensation or the law guaranteeing these transactions.

It cannot be denied that the spirit of the economic system of Islam disapproves sharp fluctuations in prices which cause economic hardship to the people. Some scholars interpret such Qur'ānic verses as: "But observe the measure strictly; and do not fall short thereof," (55:9) and " ... weigh with true balance"

(26:182) to mean that government should strive to stabilise consumer prices since inflation as such is undesirable in Islam.

The significance of equilibrium as implied in the verses cannot be overemphasised. However, to interpret them in monetary terms would appear far-fetched, if not downright distortion. Even though there may be no verses or traditions directly pertaining to the subject, the objectives of economic policy that were spelled out and pursued by the Prophet (peace be upon him) and the Pious Caliphs place a positive value on price stability in what we now call wage goods. But the point to examine is whether price stability is in itself an objective or it is intended to achieve some other objectives. Obviously, this could only be to promote the objective of the overall welfare of the people. It is interesting to note, however, that in a large number of countries of the world, people on the whole are much more prosperous during the periods of inflation than their forefathers were during periods of recession or of stable prices. The middle class which is believed to be the one most adversely hit by rising prices, now has in its reach those consumer items which people of that class did not even dream of some fifty years ago.

This indicates that the consumer's protest against inflation is perhaps not basically an economic problem; it rather represents a psychological reaction to a fall in their rate of savings because the rate of increase in the savings of the people is not commensurate with the rate of increase in their incomes due to simultaneous increase in the level of expenditure. But these facts are not sufficient to justify inflation or to reject the idea of indexation.

Basically the accepted rule of the *Sharī'ah* is that people should neither suffer nor cause any harm (لاضرر ولاضرار)[1] and that damage should be redressed (الضرر يزال)[2]. But in the case under reference, the question would arise as to who would be required to redress the damage caused to the value of the money owned by the recipient. Thus it would be in the fitness of things to first examine the factors which are responsible for a

rise in prices. In other words, we ought to study the causes of inflation and determine the party or person responsible for creating this situation.

In order to determine the responsibility for creating this situation in the light of the *Sharī'ah*, it will be advisable to avoid the terms, as far as possible, which are generally used in technical discussions on the subject. Thus during the course of this discussion we shall try to avoid the use of terms like the "aggregate excess demand" or "excess supply factors" or "demand-pull" or "cost-push" aspects of inflation. Our analysis will be couched in a non-technical language so that the application of the principles of the *Sharī'ah* might be easily grasped by all.

CAUSES OF INFLATION

Now, so far as inflation is concerned, it is a very complex phenomenon. However, our study of it leads us to identify the following as the major factors which cause inflation:

(1) A very important cause of the rise in prices is considered to be monetary expansion which may take place as a result of rising public expenditure often through deficit-financing. Another reason for rising public expenditure may be too much bank financing for which the banking system may be accounted for. Another cause may be the impact of foreign remittances which may increase demand for goods and become inflationary if these are spent on goods and services without a corresponding increase in their supply. In such a case it is the consumer who can be held responsible for monetary expansion and inflation.

(2) Prices may also rise as a result of disequilibrium between demand for and supply of goods. In addition to the factor of foreign remittances mentioned above, the increase in demand for goods and services also occurs due to increasing population and/or urbanisation. It is the

society on the whole that is responsible for a rise in the price in such situations. Scarcity in the supply of goods and services may be yet another factor causing a rise in prices. This may be either actual or contrived. In case this scarcity is due to physical constraints, nobody except the natural factors are responsible for it. This scarcity is often permanent and incurable. Temporary shortage of supply arising from the time lag between adjustment of supply to demand can be remedied but the responsibility of this temporary shortage cannot be put on anybody's shoulders as the adjustment has to take its natural course.

(3) Increase in prices may also be the result of excessive wage increases or of heavy indirect taxes imposed by the government or of the exorbitant profits made by the traders. Trade unions or labour are responsible for rise in prices in the first case. In the second case, the responsibility lies on the government while in the last case, the trader is accountable for the increase.

(4) Price increase is sometimes the result of devaluation which in itself is the consequence of a number of domestic constraints and distortions *vis-à-vis* international maladjustments. This is largely an international factor.

(5) Price increase is sometimes also imported form abroad; it is caused mainly by external factors.

(6) Price often increases as a result of inefficient use of resources by the government. We are not concerned with this factor because it involves the political system and administrative machinery. In order to precisely determine the responsibility for rise in prices, in the ultimate analysis it is the voter who is responsible for this phenomenon in a democratic system. As for aristocracy, the responsibility for rise in price due to inefficient use of resources lies on the bureaucracy.

It will be seen from the above analysis that during periods of increasing prices inflation cannot be ascribed fully to any one single factor. Often a number of factors taken together cause this phenomenon. Yet the most important and universal cause of inflation is known to be deficit financing by the government. In case a number of factors are responsible for such an increase it becomes very difficult to precisely determine the contribution of each factor separately.

THE ISLAMIC LAW OF REPAYMENTS

Before applying the rules of the *Sharī'ah* to the requirement of discharging a financial liability and determining whether it arises as a result of borrowing or as a result of a contractual or legal obligation, it has to be made clear that in the *Sharī'ah* return on human contribution and on financial contribution are governed by two different sets of rules. The former is assigned a fixed remuneration. The government may, if necessary, fix a minimum rate of remuneration and leave the maximum to the market forces.[3] On the other hand, financial contribution in the form of a loan or a debt is rewarded exactly in the same kind and quantity; any excess, over and above the sum lent would become interest which is strictly prohibited. This fact is borne out by the Qur'ān (2:279), the traditions of the Prophet (peace be upon him), and the detailed discussion by all the *fuqahā'* of all the schools of thought in Islam without any exception.

Muslim jurists are so particular about this Qur'ānic prohibition that they have disapproved this practice in all transactions where deferred transfer of commodity or money is involved. Thus the purview of this prohibition covers not only loans and debts but also credit, barter, exchange of currency, demonetization and debasement of currency, payment of remuneration after devaluation or revaluation, indemnity and a change in the unit of currency at the time of the redemption of loan.

There is no difference of opinion among the jurists on the point that any increase which is stipulated to be paid on the amount originally lent out is interest and is prohibited.[4] In the earliest days of Islam *dīnār* and *dirham* were the currency. Before the standardization of the coins during 'Abd al-Malik's reign, the value of the coin depended on the weight of its gold or silver content. The two coins, and for that matter even gold and silver, were also acceptable as medium of exchange by weight, not by counting alone. Guided by the *ḥadīth* that loan of money or commodity should be paid back in the same kind and quantity the *fuqahā'* have expressed the view that in case *dirhams* or *dīnārs* are lent out by counting, they will be paid back by counting and not by weight. Similarly in case they are lent by weight they will be returned by weight and not by counting.[5] This opinion was expressed on account of the fact that counting signifies the characteristic of money while weighing of gold or silver made it a commodity.[6] This distinction was made by the *fuqahā'* in view of the *ḥadīh* that a fungible good is to be returned by its like (*mithl*).

In respect of the loan of a commodity it is further provided by the *fuqahā'* that it should be returned in the same kind and quantity irrespective of any change in its price at the time of return of the loan.[7]

An interesting issue involved in the payment of sale price is change in the unit of currency in which the price is quoted. A *ḥadīth* disallows deferred payment of *dirham* for *dīnār* or *vice versa* and silver for gold or its *vice versa*. *Dirhams*, *dīnārs* or precious metals may be exchanged on the spot immediately.[8] As a result, the *fuqahā'* have expressed the opinion that in the case of a credit sale, payment should be made in the unit of currency quoted by the seller. Payment in terms of any other currency may not be deferred and will have to be effected without delay and at the exchange rate prevailing at the time of sale.[9]

Another interesting discussion occurs in the Islamic legal literature on the position of repayment of loan in terms of a

currency which has become debased, demonetized, or unpopular. This situation often arose in case of token coins like *fulūs*, but not gold *dīnār* or silver *dirham* which were full-bodied money. The words used to indicate these situations are *kāsid* and *fāsid*. The word kāsid, implies demonetization or unpopularity. *Fāsid*, a much broader term than *kāsid*, also carries the sense of 'debased' or 'defective'. The question is: what will happen in case token money (*fulūs*) which is lent out is demonetized? The answer to the question, as given by a jurist, is as follows:

> In case the amount of loan is in terms of *fulūs* or smaller pieces of a *dirham mukassarah* which the government (*sulṭān*) has banned and which has become out of currency the creditor will take its price. He will not be compelled to accept this coin ..., because the defect occurred when the coin was in the borrower's possession .... The price of the *fulūs* will be fixed as was prevalent on the date of borrowing and the creditor will take it regardless of the degree of decrease in its value. But in case the coin (*fulūs*), in spite of demonetization, is still in currency, and popular, the creditor shall accept the same.[10]

This approach is based on the general principle that in the case of loan of fungible goods the creditor will be paid the same quantity of identical goods irrespective of whether the value of such goods increases, decreases, or remains unchanged during the period of loan.

The same approach has been made by them in the case of payment of outstanding wage remuneration. According to Abū Yūsuf, the worker will be paid his contracted amount of remuneration even though the value of this money has changed before he is paid his due.[11]

Another situation that causes liability is unlawful occupation of somebody's property i.e. usurpation (*ghaṣb*). The usurper (*ghāṣib*) is required to return the goods or, in the case

of destruction of goods, its price, whenever the court orders him to do so. The problem arises as to the responsibility of indemnifying the owner in case the property in question is perished or the price of the property has decreased. According to *Majallah*, the owner does not have the right to refuse taking back his property even though the price of the property has declined while in possession of the usurper.[12] This is because of the fact that all fungible goods are to be compensated by similar fungible goods, not by price. The same principle will apply in the case of money. The same amount and kind of money as usurped will be payable to the owner without any consideration to its value at the time of payment. The usurper will not be required to indemnify the loss caused to the value of the property or money as a result of a fall in its price.[13] *Fatāwā-'i 'Ālamgīrī* confirms this opinion with the help of another example. According to it, if a person who takes something in his possession without the permission of the owner and sells it, he shall indemnify the owner with the price prevailing on the day of its sale.[14]

Disagreements arise among the *fuqahā'* only when the usurped property loses its value absolutely or is perished. The question as to whether the price of goods prevalent on the day of usurpation will be payable to the the owner or the price ruling on the day the property was lost or the day it was claimed by the owner has also been discussed by the *fuqahā'*. Different *fuqahā'* have dealt with the question differently even though all of them have avoided infraction of the injunctions pertaining to interest.[15]

The above discussion demonstrates that the discussions in our *fiqh* literature are not absolutely devoid of the concept of linking loan of money or commodity with its purchasing power or future value. The approach to linkage as made by our *fuqahā'* to such a linkage has been very clear and consistent. The same consistency exists in the case the liability of deferred payment arises not as a result of a transaction of loan but even as a result of barter, demonetization, debasement, devaluation or

revaluation, or in remuneration and compensation and indemnity. In all such cases a loan is to be returned in the same unit of currency and the same amount, irrespective of any change in its relative value in terms of other goods or currency. Any violation of this principle would be a violation of the Qur'ānic prohibition of *ribā* and of the Prophet's injunctions. The *fuqahā'* are so uncompromising on this principle that they do not relax on this point even in the case of redemption of the liability of the dower to a wife. According to *Fatāwā-'i 'Ālamgīrī*, the amount fixed for dower will be payable to the wife without any regard to the increase or decrease in the value of currency on the date of payment.[16] In the event of demonetization of the unit of currency (fixed at the time of marriage), the value of dower will be readjusted on the basis of its price in terms of legal currency as prevalent on the date of demonetization (rather than on the date of payment).[17]

THE ELEMENTS OF *JAHL* AND *GHARAR*

Other objectionable points from the viewpoint of Islamic law are the elements of ignorance (*jahl*) and uncertainty (*gharar*) that are observable in indexation. According to the *Sharī'ah*, one of the conditions of a valid contract of deferred payment is the precise determination of liability at the time of making the contract. Ignorance of this liability renders the contract void. In case indexation is made on the basis of *ex post facto* adjustment as is done in most of the countries that practice indexation this would mean a provision in the contract to accommodate for a situation which may or may not arise at all; and if it arises, the nature and the extent of this situation is uncertain and unknown unless the debtor offers to settle his liability. Such conditions involve uncertainty and ignorance and are termed as *gharar* and *jahl* in Islamic law. All contracts containing either of these two elements are null and void.

There is no doubt that many *fuqahā'*, in some transactions, relax the effect of *gharar* in case it is mild (*yasīr*). This, if accepted, may accommodate for the element of *gharar*

when the rate of inflation is negligible. But it will be found that this negligible rate of inflation has never posed a challenge. What disturbs the economists and the general public is the abnormal rate of increase in prices which comes under the definition of high degree of uncertainty (*gharar fāḥish*).

FOUR

THE *SHARĪ'AH* ARGUMENTS FOR AND AGAINST INDEXATION

In the foregoing pages we have mentioned that some contemporary Muslim economists consider indexation as a fair means for compensating for the loss in the purchasing power of money.[1] Since indexation was introduced in more than twenty countries of the world and remained in practice for about half a century in one way or another, it also attracted the interest of the Islamic Development Bank. In 1987, the Bank sponsored a workshop on the subject in which the arguments mentioned for and against indexation were reviewed by economists and scholars of Islamics. This chapter not only covers the arguments of the Muslim economists, both for and against indexation, that were presented by them in the papers of the workshop that have been published, but also in those papers that were presented but have remained unpublished. In some cases the readers will find that the substance of the arguments which we have mentioned of the advocates of indexation, mentioned by us earlier, have been repeated here with some modification. Likewise, the case against

indexation as presented in this chapter would also seem to be a partial repetition of what has been mentioned earlier albeit with greater details and reinforced and supplemented by additional arguments.

Even though indexation of wages and bonds has been in use for more than fifty years, the question of its application to an interest-free economy came under discussion only recently when the Muslim economists started their quest for an alternative to interest. However, the greater reason for considering indexation was its possible effectiveness as an instrument to control the vagaries of inflation which eroded purchasing power of money rather than as a substitute of interest.[2] What is clearly visible is the keenness of Muslim economists, first of all, to prove the religious validity of indexation before it is put into practice by interest-free banks.[3] For some scholars the indexing of the principal amounts commensurate with inflation or deflation seems to be a fair logical proposition.[4] Passing references to this are often made in different seminars, and the concept of indexation is introduced in order to safeguard the *qarḍ ḥasan* in times of inflation.[5] For some others it was an acceptable method to counter inflation.[6] In the same way, the rejection of indexation was also spontaneous. Some scholars found it un-Islamic on the basis of a *ḥadīth* which requires the borrower to pay back in the same kind. There was also objection against it on the ground of a change in the lender's preference over the period of loan as compared with the period of the indexed basket. This was due to the introduction of substitutes or a change in taste or usage.[7] For some it was a form of *ribā al-faḍl*. It was felt that the attempt to compensate one party for erosion in the value of money was unfair and that it would be redundant if everybody were to be compensated for the sake of justice.[8] In the meantime, two committees pondered the subject but reached two different conclusions. A committee set up in 1980 by the Finance Minister of Pakistan to propose an agenda for Islamic economic reforms, advocated the scheme on the basis of the following argument:

> The proposed system is Islamically legitimate because indexing will be some percentage of the rate of change of the price level — a variable quantity. On a limited scale, it will also be economically viable and a perfect alternative to interest-bearing option .... The proposal is also administratively simple — a decisive advantage over the administrative nightmare that the proposed profit-loss-sharing system will inflict on the policy-makers.[9]

On the other hand, the Council of Islamic Ideology, the highest official organ to advise the Islamicity of any law or scheme, considered the proposal of indexation which was referred to it by the Panel of Economists and Bankers, and rejected it on the plea that:

> Under the *Sharī'ah*, currency transactions are not treated differently from commodity transactions, in as far as lending and borrowing are concerned. The basic principle is that the same quantity (units) should be returned as was borrowed, even though the price of the commodity may have changed in the meantime.[10]

The debate on the religious position of indexation, however, continued and arguments and counter-arguments were forcefully brought forth by the supporters and opponents of the scheme. We shall reproduce, in the following pages, the arguments advanced by scholars representing both the viewpoints.

ARGUMENTS FOR INDEXATION

(1) It is argued that inflation as such is entirely a new phenomenon which was not known in the early days of Islam; in fact, it was not known before the advent of the present century. As a result the situation called for some device that would enable us to make up for the loss in the purchasing power of money suffered by the lender, especially by one who loaned out his capital on an interest-free basis.

(2) (i) The Holy Qur'ān provides for giving full measure and weighing with the correct balance (26:81-82). Similarly, the Qur'ānic verse: "And give full measure and weigh with justice" (17:35) is also adduced in support of indexation. It is argued that in modern times money is the highest measure of value. More importantly, money is also used as a means of deferred payments. Now, in a period of rapid inflation, the recipient does not receive what is really his due. This violates the directive of giving full measure. Indexation corrects this situation and hence indexation conforms to the spirit of Islamic *Sharī'ah*.[12]

(ii) Similarly, a more pertinent verse of the Qur'ān which prohibits "diminishing the goods of others" (7:85) is also adduced with the plea that while all other measures are fixed in themselves, fiat money as the standard measure of all exchange values does not change in relation to itself. Denying a compensation in the event of reduction in the purchasing power of money (which is a unit of measurement) is clearly against the spirit of this verse.[13]

(3) The Qur'ānic verse: "O ye who believe! Fulfil your undertaking" (5:1), is also adduced in support of indexation on ground of the plea that Islam directs its followers to fulfil contracts both in letter and spirit. That is considered to be a part of one's belief (23:8). It is concluded that even though inflation may not cause any problem in fulfilling the letter of deferred payment contracts, yet it is often violative of the spirit of the contract in so far as the borrower is, in fact, not paying back the same quantum of purchasing power which he had borrowed. Legally, only the letter can be enforced. It is argued that indexation allows us to safeguard both

the letter and the spirit of the contract and is, therefore, preferable.[14]

(4) Some scholars distinguish between 'natural' money consisting, say, of bullion and conventional (*iṣṭilāḥī*) money and claim that in the event of abrupt change in the value of the latter form of currency, the *fuqahā'* have discussed the situations of general or local rejection (*kasād*) of currency, its discontinuation or its appreciation or depreciation but have not discussed the purchasing power of money which is a new phenomenon. Hence, were one to introduce indexation in response to the requirements of the changed circumstances, that should be acceptable from an Islamic point of view.[15]

(5) It is obligatory according to Islamic law, to redeem an equivalent value (*sawā' bi sawā'*) regardless of change in price. It is argued that the value of fiat money is measured in terms of commodities and services and therefore the equivalence in the value of money requires equivalence in its purchasing power at different periods of time.[16]

(6) An important argument revolves around the early copper coin, *fulūs*. It is argued that the *fuqahā'* are in favour of redemption of a loan of *fulūs* in terms of their value concluding therefrom that fiat money or fiduciary money is just like early *fulūs* and, therefore, it is the value of the purchasing power of fiat money that is to be returned rather than the exact amount of loan as represented by the units of the fiat money.[17]

(7) For some, the Ḥanafī doctrine that the price of a commodity bought on credit may be higher than its cash price, is an implicit recognition of the time value of money. As a result, any adjustment in the liability of the borrower in terms of money so as to reflect the change

in the value of money would be quite in conformity with the above mentioned doctrine of the Ḥanafī school.[18]

(8) It is also argued that in Islam the interest of both the borrower and the creditor is treated on the same footing because the Qur'ān not only protects the interest of the borrower but also that of the lender.[19] "Wrong not and be not wronged" (2:281), says the Qur'ān. It is argued that through indexation the interest of the lender would be safeguarded.

(9) The most important argument that a number of scholars have is based on the distinction that they make between the nominal adduced value and the real value of money. It is argued that in the transaction of a loan it is the real rather than the nominal value of money that is required to be returned.[20]

(10) According to some scholars, indexation should be acceptable because, unlike interest, its rate is not pre-fixed.[21]

ARGUMENTS AGAINST INDEXATION

The opponents of indexation, on the other hand, examine indexation against the criteria established by the *Sharī'ah* and make out a strong case against it on the following grounds:

(1) Negatively speaking, it is contended that the that the argument built on the basis of the Qur'ānic verse 7:85 is weak. For, while the concept of equilibrium referred to in the above verse is significant, its interpretation in terms of the monetary phenomenon seems far-fetched, if not a total distortion of its meaning. There is no doubt that sharp fluctuations in prices, which cause much economic hardships to the people, are not in tune with the spirit of Islam. Even though there might not be any specific verses or traditions which directly touch upon the subject, the objectives of economic policy that were

spelled out and pursued by the Prophet (peace be upon him) and the Pious Caliphs would put a premium on price stability in what we now call wage goods. But the point to examine is whether price stability is in itself an objective, or is intended to achieve some other objective. Obviously, this objective is to achieve the overall welfare of the people.[22]

(2) (i) The basic idea of indexation seems to be discordant with the accepted norms of justice. Now, as we know, indexation is supposed to be a compensation for the loss suffered by the lender owing to decrease in the purchasing power of money. However, compensating for or indemnifying the loss should be done by the party responsible for inflicting that loss. But inflation which leads to that loss is caused by a multiplicity of factors. These factors are so complex and interrelated that it is virtually impossible to precisely determine the extent to which each of these factors have caused inflation. It is possible that indexation might penalise the party which might not be responsible at all for inflation, viz. the borrower. The ultimate burden of extra payments through indexation in case where the government is responsible for its payment falls on the tax-payer who himself is a victim of inflation. The concept of public interest in Islam also absolves the government of its liability to indemnify for decrease in purchasing power caused by inflation due to its policies pertaining to expenditure undertaken for such good purposes as public welfare and defence.[23]

(ii) Another aspect of in-built injustice in indexation is that it is a one-way traffic; that is, it is enforced only when there is an upward

movement of prices and not *vice versa*. No one would be willing to accept an amount which is nominally less than what he had lent in case there occurs deflation. During the course of inflation, however, one would be assured of the nominal or real amount, whichever is higher. And that is what everybody would gladly accept. We have no instance of a country which had applied indexation in a situation of deflation. However, were we to enforce indexation of deposits and loans both ways, that would simply not work.[24]

(iii) A third aspect of injustice lies in the index basket. This basket represents the consumption habit of an average person which does not necessarily represent the habits of actual men and women living in a society. This average will be unfair for some but an unjustifiable favour for some others. The index basket will either represent the expenditure in the whole country or a fresh basket will have to be devised for each economic region. Another distinction will have to be made on the basis of economic classes since a single basket for all is likely to be unjust. Alternatively, it will become too unwieldy to be practiced.[25] Socio-economic justice would necessitate the indexation of income and monetary assets not by means of a single universal index, but of several indices based on the current expenditure pattern.[26]

(iv) Apart from the injustice that the adoption of a common basket index for many classes and regions would cause, indexation also involves temporal injustice. An index can be made on the basis of prices on a particular date or on the basis of average prices during a particular

period, only a few times during a year. However, the activities of saving, lending, depositing and redemption are an inalienable place of business life and take part virtually every day. Thus indices based on periodical averages can never be precisely factual and fair.[27]

(v) Another aspect of the injustice inherent in indexation lies in its macro-approach. One might agree to the principle that compensation should be made for the loss in the purchasing power of money. But the question remains: to whom? It is the savers individually, not collectively, whose purchasing power is to be made up. The question then arises: Is the criterion of consumer basket the true determinant of the loss that each saver suffers? As a matter of fact, the extent of loss in the real value of money depends on the purpose for which a person saves money. Mr. X saves for trading in cotton when the new crop is ready. His loss in purchasing power of money will depend upon the cotton prices at the time of cotton harvest. Mr. Y saves in order that he might be able to send money abroad to his son for higher studies. His loss will depend on the increase that has occurred in the educational expenses in the country to which he goes. Mr. Z, to take another instance, saves for the wedding of his daughter, and so on. Thus it will be found that nobody saves for the purchase of the index basket and to link savings to any sort of basket will be unrealistic and unjust. If the loss in purchasing power is really to be compensated for, it should be done according to the loss suffered by the individual savers. This, however, is impossible. Compensating for the

loss in the purchasing power of money is a micro-economic phenomenon. Dealing with it on the macro-level is always bound to be tainted with injustice since it is impossible to determine with precision the extent to which each person has suffered in respect of his purchasing power.[28]

(vi) In addition to all these injustices, the fact remains that it is not the act of lending or borrowing that erodes the purchasing power of money. Money in an inflationary situation would lose its value even if it is hoarded by the owner.[29] As such, seeking compensation for this loss in the purchasing power of money from the borrower seems bereft of justice.

(3) Indexation during a secularly inflationary period amounts to a gain without risk.[30]

(4) According to some scholars there is a consensus (*ijmā'*) that when a fungible good is lent, the borrower is obligated to return that good in the same quantity and of the same quantity. Thus while making any adjustment for inflation in the event of the return of a loan of cash or of goods the principle set down by consensus cannot be disregarded.[31]

(5) Indexation means that the lender was entitled to receive the value but not the exact amount of money lent out. Now lending, according to Islamic principles, is a virtuous act which concept discards any reward for one's sacrifice of parting with liquidity whether this reward be in terms of value or quantity. Indexation during inflation would mean that the lender charges for his sacrifice. This is against the spirit of lending and discarded by *fuqahā'*. What is permissible according to all the schools of law is the return of the same quantity and kind.[32]

(6) . The need for indexation is felt because of instability in prices. The policy alternative which best conforms to the norm of socio-economic justice is price stability rather than indexation.[33] In this connection, it needs to be borne into mind that the early Islamic monitoring of prices and rates of profit were aimed at ensuring free market operations by discouraging monopoly prices and cut-throat competition.[34]

(7) The Islamic ideal is to establish an interest-free financial system. In case the system is implemented this will require alternative modes of financing such as *shirkah*, etc., for financing commercial, productive and developmental purposes in place of advancing loans at interest. However, loans will be needed for national and humanitarian purposes. Indexing such loans will be unjustified from the borrower's point of view.

(8) Under an interest-free banking system if the rate of inflation is higher than the rate of profits, it will discourage banks from accepting loan accounts and advancing funds on the basis of equity.[35]

(9) Likewise, indexation by banks would have serious repercussions on voluntary private lending. If individuals are also tempted to adopt this scheme, it will open the floodgates of interest in the society.[37]

(10) Indexation would bring about confusion in the entire currency system by attributing different values to the same money according to its repository. Thus the same money in imprest, in bank, and in business will bear three different values. In a period characterized by inflation the value of money in imprest will continue to fall; the value of money in business will depend on its productivity and the value of money in the bank which is advanced as indexed loan will remain constant. Thus the value of money that fluctuates only temporarily will be exposed to spatio-temporal variations. This will take

away the basic characteristic of money which makes it a unit of account.[37]

A study of the above arguments and counter-arguments would reveal that the controversy basically rests, to a very large extent on on three concepts which, if clarified, should be helpful in resolving the differences. These three concepts are given below:

(i) the Islamic concept of money and the position of paper currency;
(ii) the Islamic position regarding the value of money; and
(iii) the position of the *Sharī'ah* on the index-basket.

THE ISLAMIC CONCEPT OF MONEY

According to some scholars it is *thamaniyyah* (price-worthiness) that makes a thing money. Thus *dīnār* and *dirham* were treated as money because they possess the attribute of 'price-worthiness' but not because they were made of gold or silver which are commodities, but not money. And this 'price-worthiness' is reflected in two functions of money — its being medium of exchange and unit of account.[38] These are the absolute functions of money. Anything that performs these functions is termed as money whether or not it possesses such attributes as store of value and standard of deferred payment. Thus we may even adopt potatoes, which are quickly perishable, or leather which is slowly perishable, or platinum it will be necessary to which is imperishable to serve as money. But in all these cases it will be necessary to apply the Islamic rules of money-exchange, (*ṣarf*).[39]

The same is true of fiat money. It is *al-nuqūd al-sulṭāniyyah*, legal tender, in the Islamic parlance. It price-worthiness It is a medium of exchange and a unit of account. As a rule, anything which is not gold or silver and is not edible (like wheat, barley, date, salt) may be exchanged unequally, on the spot or later. Fiat money is also not gold or silver, nor does it represent bullion, nor is it edible and yet a $100 note may not be

exchanged for $120 either on spot or at a later date. This is so because fiat money possesses 'price-worthiness' and is introduced and used as money irrespective of its intrinsic quality. Also, since it is used as money, *zakāh* is obligatory on bank-notes on their face value for the simple fact that they are money (*naqd*), and command value in exchange.[40]

Some scholars, following in the footsteps of the earlier Muslim scholars in defining the functions of money, have classified money into natural money (*naqd bi al-khilqah*) and conventional money (*naqd iṣṭilāḥī*).[41] The former represents bullion money because, as they argue, gold and silver were created by Allah to act as price (*thaman*). The latter namely conventionaly money represents all forms of money whether made of inferior metal or paper or some other commodity. The former is money *par excellence*; the latter is only token money.

This classification which, in fact, relates to the contents of money has led to two conflicting conclusions. For some *fuqahā'*, non-bullion money, like *fulūs*, is not to be treated as real money having a natural value. As a result any excess in exchange of *fulūs* whether on the spot or in deferred payment did not fall in the purview of prohibited *ribā*; nor was it subject to the levy of *zakāh*.[42] Some other *fuqahā'*, however, have had a different view. For them such money commanded a price (*thaman*) and was subject to the Islamic injunctions about *ribā* and *zakāh*.[43] On the other hand, the nature of disagreement concerning paper money was different. Here the issue was whether paper currency (bank-notes) represented an instrument of debt or of money. The inscription on the bank note reading "I promise to pay to the bearer on demand an amount of ..." led some *fuqahā'* to believe that a bank-note was an instrument of debt. As such the value inscribed on it was not subject to *zakāh* nor its exchange for another instrument promising to pay a different amount was *ribā*. But later on the *fuqahā'* were convinced that bank notes represented money and as such were subject to the injunctions on *ribā* and *zakāh*, as it was leviable on

fulūs in circulation.[44] For some others, money is a notional thing which is backed either by government authority or convention.[45]

The position of *fulūs* and paper currency, as explained above, automatically undermines the argument adduced by the supporters of indexation that fiat money is like *fulūs* which many early *fuqahā'* treated as commodity and, in the event of its demonetization or discontinuation, its value in terms of *dirham* or *dīnār* was made payable.[46] They ignored the fact that *fulūs* did not provide a point of analogy for paper currency because paper currency is now the only legal tender, has a fixed value, and commands the authority of the state. *Fulūs*, on the contrary, were not generally official coins, had no standard weight, nor were popular currency. Each province had its own standard of *fulūs* weighing from six grams to thirty grams. Even the towns in the same province had sometimes different standards.[47] Thus, Islamic law did not treat it as a legal tender. As a result, the Islamic law of repayment was not made applicable to *fulūs*. It was treated as a commodity. And the law about the payment of a commodity loan is that its price prevailing at the time of contract would be payable if the commodity has become extinct. Thus in the event of government's ban on this unofficial token money, its price in terms of official currency, viz., *dīnār* or *dirham* prevailing at the time of the contract, was made payable.[48] There was no such thing in the case of *dīnār* and *dirham*. In addition to this absence of similarity between *fulūs* and fiat money another point of dissimilarity lies in their functional character. The proponents of indexation themselves acknowledge that fiat money is the source of inflation. This is a factor which was not observable earlier, obviously not even during the circulation of *fulūs*. This is an additional factor that the analogy of *fulūs* to fiat money is false.

2: THE ISLAMIC POSITION REGARDING THE VALUE OF MONEY

The current discussion on the subject which tries to relate the values of *dīnar—dirham—fulūs* to their purchasing power, on the authority of early *fuqahā'*, has been confused by Muslim economists who have mixed up the concepts of intrinsic value with exchange value. In most such discussions the *fuqahā'* have generally given consideration to the intrinsic value of metallic money, unless the problems of indemnity, etc., arise. In cases like credit, exchange of currency, debasement of currency, devaluation, revaluation, and change in the unit of currency at the time of repayment, it is generally the intrinsic value of money which the *fuqahā'* have considered and not the purchasing power of bullion money which the Muslim economists have mistakenly referred to. As a result, this confusion had led them to distinguish between real value and nominal value in terms of purchasing power.

In the context of *ribā*, the meaning of value in the case of bullion coins is different from the meaning of value in the case of paper money or debased money. The value of bullion money is represented by its contents; the value of paper money or debased money is represented by official commitments rather than its physical content.

Thus any reference to *fuqahā'* in distinguishing between the nominal value and real value of money indicating its purchasing power and relating it to the Islamic law on *ribā* is fallacious. In this way the conditions of returning identical and equal (*mithlun bi mithlin, swā'un bi sawā'in*) as laid down in the famous *ḥadīth* on *ribā* and as emphasised in *Fiqh* literature discards the distinction between real value and nominal value made by the advocates of indexation. For the *fuqahā'*, the condition contained in the words of the traditions pertaining to *ribā al-faḍl* are not susceptible to changes in purchasing the power.[49]

3. THE *SHARĪ'AH*-POSITION OF THE INDEX-BASKET

The index-basket as known and practised at the present was criticised by most of the opponents of indexation. Even some of the advocates of indexation have doubted the soundness of index-basket from the Islamic point of view. In essence, it is this index-basket that determines the standard of settlement of contracts involving deferred payment. In Islamic law it is *māl* which can be lent and borrowed and that is the standard of deferred payment. It is the quantity of this *māl* which is contracted to be returned. *Māl* has a value and has a demand. The question is whether an index-basket qualifies to be considered a *māl* and a standard of settlement of debt liabilities. A basket of commodities is an accounting concept. It has no value because it has no want and is neither demanded, nor supplied; it is the individual commodities as such or money that are demanded and supplied. Thus it is doubtful if determining this basket as a standard of value in future payments may be regarded as acceptable in Islamic law.

The discussion on the position of indexation in the *Sharī'ah* sponsored jointly by Islamic Research and Training Institute of Islamic Development Bank and the International Institute of Islamic Economics, Islamabad did not conclude in favour of indexation but it did bring to light some of the neglected aspects of the concepts that are essential for a clearer and a more correct understanding of Islamic economic values and institutions. The controversy on indexation seems to have arisen because of lack of proper appreciation of those concepts and this is bound to create confusion on a number of contemporary economic issues.

(1) The first and foremost among these neglected aspects is the Islamic concept of money with particular reference to its functions. So far attention has been paid to the position of paper currency in order to determine whether the Islamic prohibition of interest and the injunction

pertaining to *zakāh* would be applicable to this fiduciary money. What is needed is to consider whether the early approach of the *fuqahā'* who classified money into natural and terminological or real and conventional has any contemporary relevance. Another aspect of this study is the proposition of the early *fuqahā'* that bullion is a divinely established standard of value. This is the view that our highly celebrated commentators and scholars from the third to the sixth *Hijrah* century were led to in view of the traditions which prohibit exchange of gold for gold and silver for silver except under certain strict conditions. The question is if this can be the only possible interpretation of the *'illah* of the prohibition.

Another aspect of the study of the concept of money lies in determining the significance of studying the functional characteristic of money. Is a distinction between the absolute functions and the relative functions of money susceptible to any change in so far as the question of deferred payments is concerned? Will any person or authority be liable if fiduciary money is impaired in discharging its relative functions?

(2) A very clear concept of *gharar* and *jahl* in the context of present day money/commodity transactions also seems to be of vital importance.

(3) The Islamic concept and components of value with reference to real and nominal value have perhaps been entirely neglected by Islamic economists so far. There is a need to concentrate on this issue which might contribute to arriving at a clear judgement about the permissibility or otherwise of a number of contemporary institutions and theories.

(4) A comprehensive discussion of the concepts and scope of *ribā al-nasī'ah* needs to be made and more so of *ribā al-fadl*, particularly in the context of its bearing on

indexation. The wisdom of the prohibition of *ribā al-fadl* in the *Hadīth* needs to be elaborated in a manner that would bring out its contemporary relevance.

(5) There seems to be some confusion in interpreting the Islamic approach to price stability due to a blurred concept about market mechanism in an Islamic system. Islamic economists seem to possess mutually conflicting views issue which require to be critically examined in order to arrive at a conclusion fully in accord with the letter and spirit of the Islamic teachings on the issue.

(6) Contemporary concepts and theories such as those of scarcity value of capital, shadow price, opportunity cost, time discounting and liquidity preference and the like apparently seem to carry some weight and persuade many Islamic economists to rationalize them in a way that leads to the circumvention of the prohibition of interest. The Islamic literature that rationalizes prohibition of interest places greater emphasis on moral, psychological, and social evils brought about by interest rather than discard it on purely economic grounds. The few papers that have attempted to do so need to be supported by sound statistical evidence.

A thorough and convincing study of the above issues may, it is hoped, provide us with some significant clues to the spirit of a monitary system which is truly Islamic.

FIVE

RATIONAL ARGUMENTS FOR AND AGAINST INDEXATION

The foregoing discussion would suggest that it would be difficult to make a strong case in favour of linking loans and debts to the purchasing power of money on grounds of the Qur'ān and the *Sunnah*. It may be claimed, however, that indexation can be supported on rational grounds. We shall examine this claim in the following pages.

1. THE NEED FOR *IJTIHĀD*

During the recent decades the endemic phenomenon of world-wide inflation has been causing dislocation in the economic life of man at a scale that was never experienced before. The extent of fall in the purchasing power of money, mainly during the seventies and afterwards, has brought about irreparable distortions and robbed money of some of its characteristic functions. It is necessary, therefore, to exercise *ijtihād* and not to feel bound by the opinions of the early *fuqahā'* who did not face the existing situation.

The answer to this argument is that on this issue the *fuqahā'* have not based their opinion on logic, analogy or public interest; they have been guided by the injunctions of the Qur'ān and the instructions of the Prophet (peace be upon him). Both the Qur'ān and the instructions of the Prophet (peace be upon him) are the basic and irrevocable sources of law and are known as legal text (*naṣṣ*). The rule is that *ijtihād* is done only where *naṣṣ* does not exist. And because this opinion is based on a *naṣṣ*, *ijtihād* is not permissible.[1]

2. INDEXATION — A MEASURE OF RELIEF

The Prophet (peace be upon him) has said that no damage should be done nor any should be borne (لاضرر ولاضرار).[2] On this basis the *fuqahā'* have observed that a damage should be redressed (الضرر يزال).[3] Since inflation has inflicted a damage to the purchasing power of money and the creditors and the savers have been subjected to damage, efforts ought to be made to provide relief. It is possible to do so through indexation.

In order to refute this argument we shall have to examine the applicability of the Islamic law of indemnity in the context of indexation. The law provides that a person responsible for inflicting a damage should indemnify the victim. We have already observed in the above pages that inflation which is often the source of this damage is caused either by the government, or by the society itself, or by the consumers, or by natural factors, or by trade unions, or by factors operating on the international scene. In a large number of cases, it is a combination of all the factors which is responsible for inflation, and it is never quite clear as to which of these factors ought to indemnify the sufferer. In case the trade unions are made responsible for a cost-push inflation, how can a bank be justified in making the entrepreneur indemnify the fall in value of its loan money? Will it not be inflicting a double punishment on the entrepreneur by making him pay higher wages to the labour and higher cost of loan to the bank? Similarly, why should a borrower be made to pay for decrease in the value of money that occurs due to

demand-pull inflation caused by receivers of foreign remittances or the recipients of fabulous salaries and incomes?

In some countries indexation is limited to government bonds. This means that the government indemnifies only the bond holders. One may ask: is it fair to indemnify only those who can spare their savings for long periods and leave out the other inflation stricken classes? One may also ask: at whose expense would the bond holders be indemnified? Public treasury is mostly financed by public taxes. In other words, it is the society which indemnifies the bond holders although everybody in the society suffers as a result of inflation. All these facts lead to the conclusion that indexation fails to punish the main culprit, and it seems quite unjust that those who inflict a wrong should be spared whereas the victims should be made to suffer.

3. THE RESPONSIBILITY OF THE GOVERNMENT

It might be advocated that the government should index all its taxes and, in return, all its payments, at least to the extent it is responsible for causing inflation through deficit financing and indirect taxation. While it is not possible to precisely determine the extent or responsibility of inflation caused by non-government sector, it is not absolutely impossible to ascertain the government's share of responsibility. Even otherwise the government, by virtue of being a general guardian of the interest of the people *(al-walī al-'āmm)* may indemnify the people of their loss in the purchasing power of money whether or not it is responsible for inflicting this loss. In this respect, the guiding principle is (الضرر يزال) (a damage is to be redressed). It is, therefore, the duty of the government to provide relief because of the financial hardship they suffer by indexing its bonds and securities.

A more careful consideration will reveal that the legal maximum (الضرر يزال) to which mention has been made

does not apply to this case. The rule is applied subject to some conditions, for example:

(1) when one is sure that a damage will not be replaced by a bigger damage or a similar damage (الضرر يزال بمثله);

(2) a minor damage will be tolerated to get rid of a serious damage (الضرر الاشد يزال بالضرر الاخف); and

(3) a particular damage may be tolerated to redress a general damage[4] (يتحمل الضرر الخاص لدفع ضرر عام).

Before applying these rules to indexation, one might well recall the discussion on the pros and cons of indexation in chapter 2.

It has been pointed out that according to many observers, "indexing has not had a major identifiable effect on the economy in any of the countries". "It does not appear to have had a significant effect on inflation either way". "It is a mechanism which is very much complicated to devise and operate." "It is a recipe for built-in inflation". "The escalator clauses always create an automatic mechanism of inflationary feed-back."[5] The question will arise whether we would choose to resort to a more complicated mechanism in place of a simple routine without expecting any check on inflation. This would mean that we are replacing an easier procedure by a more difficult one. This would be a violation of the first condition as mentioned above.

There is no doubt that an Islamic state is supposed to redress the hardships of the people. This is particularly necessary in case the policy of the state itself is one of the main causes of this hardship. Monetary expansion brought about by rising public expenditure through deficit financing is treated to be a policy that often causes inflation even if no other factors responsible for this situation are involved. But the question will arise why the government resorts to monetary expansion. The answer is that the government does so for the overall development of the

community, the whole country and of posterity. Inflationary policies create an infrastructure for overall growth and employment opportunities. Rejection of this policy would mean rejection of creating the infrastructure and employment opportunities. It is not logical to accept the one and reject the other. Nor does it seem practicable to restrict the effects of the policy only to positive aspects. Confining the government expenditure to regular budget and neglecting the major development programmes involving huge expenditure can, for some time, save people from the hardships of inflation. But at what cost? In the present day, it would be at the cost of economic and political survival. This will mean protection from a minor damage at the cost of a serious damage to the community. This will violate another condition of the principle which is (الضرر الاشد يزال بالضرر الاخف) (a serious damage will be redressed by a minor damage).

Moreover, development programmes and defence preparations may be withdrawn in favour of the purchasing power of the present generation but this may be done only at the expense of the independence and economic prosperity of posterity. Thus a particular damage (الضرر الخاص) will be avoided by exposing the country to a general damage (الضرر العام). This will be the violation of the third condition of the principle of which says that a particular damage will be tolerated in order to avoid a general damage. Thus the application of indexation cannot be justified on this basis.

4. ANALOGY OF WAGE-INDEXING

Another argument that may be adduced in support of indexation is that during inflation trade unions succeed in increasing the wages of the labour and the contractors also often add an adjustment clause providing for an increase in the amount of their contract bid in case the prices of their supplies rise in the market. If such increases are permissible in the *Sharī'ah* on the ground of increase in prices how can indexation, which is a more sophisticated device of adjustment, be considered unjustifiable?

It is a fallacious analogy because in the *Sharī'ah* the return on the service or for goods is governed by a different rule than return on loan. Any increase in the return on the service or goods is increase in remuneration or price, while increase in the amount of loan is interest. The former is permissible; the latter is prohibited and is sinful.

It will be evident from the above that indexation is not in conformity with the basic laws and the spirit of the *Sharī'ah*.

In addition to the points that have been presented to repudiate the arguments for indexation, there are also some additional considerations that lead one to reject the concept purely on rational grounds.

5. THE NATURE OF MONEY

The value of money is a relative concept. It does not necessarily represent the intrinsic characteristics of money. The intrinsic characteristics of money are its role as a medium of exchanges and as a unit of account which are some of its traditional functions. During an inflationary situation these intrinsic characteristics of money retain their role. What does change and is affected by a host of developments is the future value of money i.e. in terms of its exchange value. Thus the intrinsic characteristics remain constant and only the relative characteristics change and the latter have been changing since the introduction of money in economic transactions. This is true of full-bodied coins too. The basic question is: who is responsible for this change in the relative characteristic of money? Obviously, this change is not inherent in money. In other words, a rise in price level resulting from increase in money supply, with velocity remaining unchanged and no increase in goods and services during the same period would result in a decline in the value of money.

Again, change in the prices of individual commodities is generally not uniform and the relative value of money would vary with the magnitude and nature of change in prices. It means

that there are some factors other than money that prompt these variable changes. These factors are changes in the volume of money and its velocity, supply and demand of individual commodities, market imperfections, rigidities, expectations, and so on. All these factors contribute to determining the prices which broadly reflect the value of money in terms of each commodity and transaction, but not the intrinsic value of money which remains intact with its inherent characteristics. Thus it is not the money that requires indexation; it should be something else other than money that needs to be remedied.

6. THE FALLACY OF THE FUTURE

The basic idea behind indexation is that it would indemnify the owner/creditor for the loss incurred in the future purchasing power of money. But practically indexation does not properly take care of this loss. Loans are advanced out of the savings which are meant for future consumption. This future is not the moment when a loan is redeemed; it rather begins from that moment. If the value of money is to be regarded as a just standard of payment, the relative depreciation or appreciation of money in the future should be the deciding factor in addition to the absolute degree of fall in its value during the period of loan. Thus if money is advanced at a time when it is depreciating, say, at 15 per cent per month it should be returned when this rate of depreciation is prevalent. It is not just to borrow a money which was depreciating at 15 per cent per month and return a money which is depreciating at 25 per cent. It is equally unjust to lend a money undergoing 30 per cent depreciation and claim it when the rate of this depreciation becomes 12 per cent. In case the value of money is accounted for it should fully represent the present and potentially future value. An addle hen should not be returned for a layer and *vice-versa*. Thus it is not only the purchasing power of money that should be guaranteed but also the prospective potential of money that should be ensured. This, however, is an impossible condition to meet. This means that indexation alone will never meet the criterion of justice.

7. THE CHOICE OF INDEX

Another aspect of this injustice is the choice of the index itself which represents the basket of consumer goods and their weights that are included in price index. Apart from the factor of deliberate manipulation of the list of consumer goods and their weights the manipulation in prices and the readjustment in taxes as discussed in the above lines, the index represents the consumption habit of an 'average person', which does not represent the overwhelming majority of actual persons. Pattern of expenditure differs from person to person, hence the marginal utility of money and of the value of savings which are not uniform in different cases. Thus measuring the value of money or its marginal utility with a common consumer basket will surely be an overestimate in some cases and underestimate in others. This will amount to inflicting injustice on some and providing unjustifiable favour to others. Moreover, the basket will either represent the expenditure in the whole country/region or a fresh basket will have to be devised for each economic region representing a different mode of living, consumer items, price structure, substitutes, traditions, habits and such other factors. Another distinction will have to be made class-wise. If a single basket is made to represent the expenditure in the whole country it will be unjust. If consideration is given to different classes and income groups, it will become very unwieldy.

8. THE FALLACY OF STABLE PRICES

Stability in prices is an ideal. But this can be achieved and maintained for ever in a primitive, stationary society but only for a short period in a dynamic society. Stable prices in the face of fast changing habits, modes of production, consumption patterns, standards of living, inventions and defence technology is an inaccessible ideal—a dream that can never materialize. The villagers in developing countries who used earthen wares some fifty years ago switched over to aluminum wares, then to enamel wares, then to steel wares, and now some better off families have switched over to melamine wares. Each switch-over

creates demand for a better substitute without reducing the price of inferior items. The need for financing the better substitute requires increase in the rate of return accruing to the villager The phenomenon called higher standard of living involves all classes and groups of the society and becomes responsible for demanding an increase in wages and charging of higher profits. This itself initiates the vicious circle of inflation from which it is impossible to get out.[6]

9. THE REVERSE HYPOTHESIS

While arguing for indexation, the entire discussion seems to assume a permanent inflationary situation in the future. Wisdom demands for assuming the fate of indexation in a reverse situation also. In case indexation is once accepted as a fair mode of deferred payment what will happen if a deflationary situation sets in. If indexation is applied during high rate of deflation or during recession the ruin that the psychological reaction to a rising trend of purchasing power of money due to deflationary situation will bring about can be easily visualized. In such a case the monetary system will suffer a speedy collapse and possibly a chaotic situation in international trade and payments will set in.

10. LOSS OF MEASURE OF VALUE

Indexation is prescribed by some economists to remedy the two failings of money (viz. as a store of value and a standard of deferred payment), which become apparent at the time of inflation. But the interesting point is that the use of this remedy leads to divesting money of another of its functions viz. a measure of value, without restoring any of its lost characteristics. Indexation introduces an elastic basket for the measurement of value — the price index, instead of money as a measure of value. Thus, rather than provide a remedy, indexation introduces one more malady.

SUMMARY AND CONCLUSIONS

About twenty-one countries of the world have introduced indexation but the extent and coverage of indexation is not the same in different countries. A large number of countries have indexed wages, pensions and social security payments. Some other countries have indexed a single bond while many countries have indexed different forms of investments. Brazil is the only country which has adopted comprehensive indexation. It is because of these discrepancies that the device of indexation and the choice of index vary in different countries. The most common method of indexation is to link wage or investment to consumer prices or cost of living. Some countries make advance adjustments with prices while most countries practice *ex post facto* adjustments. The period of adjustment ranges from one month to one year; in some cases even three years.

The merits attributed to indexation are generally of a theoretical character. As against it the contestants of this approach have based their arguments partly on theory and largely on the basis of experience gained in different countries of the world.

In ultimate analysis indexation would mean that someone has to compensate the sufferer for the damage caused to the purchasing power of his money or for decrease in its value. It

may be payable by the government, the employer, the borrower or the banker. In order to examine whether the *Sharī'ah* holds such a payment by any of these parties as legitimate, we shall have to apply the Islamic law of compensation to these transactions after we have determined the person or the institution responsible for inflation.

Return on physical human contribution and on financial contribution is governed in Islamic law by two different sets of rules. The physical contribution is assigned a fixed remuneration. The government may, if necessary, fix a minimum rate of remuneration and leave the maximum to market forces. This remuneration may be reduced by mutual agreement, or enhanced through mutual bargaining or *ex-gratia* by the employer. On the other hand financial contribution in the form of a loan or a debt is to be paid back exactly in the same kind and quantity; and excess over and above the sum lent would become interest and is considered strictly prohibited. This fact is laid down in the Qur'ān and in the *Hadīth*. All schools of Islamic law are also agreed in the point.

Muslim jurists are so sensitive about the Qur'ānic prohibition that they have disapproved this practice in all those transactions involving deferred transfer of commodity or money. Thus the purview of this prohibition covers not only loans and debts but also credit, barter, deferred exchange of currency, demonetization, delayed payment of remuneration after devaluation or revaluation, indemnity and change in the unit of currency at the time or redemption of loan.

Guided by the traditions relevant to the subject the *fuqahā'* have firmly held the opinion that in case *dirhams* or *dīnārs* are lent out by counting, they will be paid back by counting and not by weight. Similarly, in case these are lent out by weight they will be returned by weight and not by counting. Consistent with this strict attitude, the *fuqahā'* have stuck to the view that if someone has borrowed a commodity he should

return it in the same kind and quantity irrespective of any change in its price at the time of return of the loan.

In case the amount of loan is in terms of *fulūs* or smaller pieces of *dirham* which the government has banned and which has gone out of circulation, the creditor will take its price. He will not be bound to accept this coin because the defect has occurred when the coin was in the borrower's possession. The price of the *fulūs* will be fixed as current on the date of borrowing and the creditor will take it irrespective of the degree of defect in its value. But in case the coin, in spite of demonetization, is still in circulation and popular, the creditor shall accept the *fulūs*. This approach is based on the general principle that in the case of loan of a fungible good the creditor will be paid the same quantity of identical goods irrespective of whether the value of such goods increases, decreases, or remains unchanged during the period of loan. The same approach has been adopted by them in the case of payment of outstanding remuneration.

Another situation that causes liability is unlawful seizure of somebody's property — usurpation (*ghaṣb*). The usurper (*ghāṣib*) is called upon to return the goods or, in the case of destruction of goods, their price whenever the court orders him to do so. The usurper will not be required to indemnify the loss caused to the value of the property as a result of a fall in its price.

The approach to linking the liability to purchasing power made by the *fuqahā'* is very clear and consistent. The same consistency exist in case liability of deferred payment arises not as a result of a transaction of loan but even when it arises as a result of barter, demonetization, debasement, devaluation or revaluation, remuneration and compensation and indemnity. In all these situations a loan is required to be returned in the same unit of currency and the same amount irrespective of any change in its relative value in terms of other goods or currency. Any violation of this principle would be a violation of the Qur'ānic

prohibition of *ribā* and of the holy Prophet's injunctions. The *fuqahā'* are so uncompromising on this principle that they do not relax it even in the case of redemption of the liability of dower to a wife. According to *Fatawā-i 'Ālamgīrī*, the amount fixed for dower will be payable to wife without any regard to increase or decrease in the value of money on the date of payment.

Another objectionable point from the *Sharī'ah* point of view is the element of ignorance and uncertainty that is observable in indexation. According to the *Sharī'ah*, one of the conditions of a contract of deferred payment is that the liability at the time of making the contract should be precisely determined. Any uncertainty or lack of clarity pertaining to this liability makes the contract void. In the case of indexation, the liability becomes known on the date one is required to make the payment, but not at the time of entering into contract. While *ex post* indexation involves an element of ignorance (*jahl*), projected inflation involves the element of uncertainty (*gharar*), and each of these makes a contract null and void.

While the principle of linking loans and debts to the purchasing power of money cannot be justified in view of the clear statements in the Qur'ān and the *Sunnah*, one occasionally encounters arguments in the name of rational thinking—whatever that euphemism might mean. We shall examine some of these arguments and see to what extent they are persuasive.

(1) The phenomenon of worldwide inflation causes hazards in the economic life of man to an extent never experienced before. It is necessary, therefore, to do *ijtihād* and not rigidly adhere to the opinions of the early *fuqahā'*. The answer to this argument is that the rule is thatrecourse to *ijtihād* is valid in the absence of relevant texts (*naṣṣ*). Now, since this problem is covered by a *naṣṣ*, *ijtihād* is invalid.

(2) The Prophet (peace be upon him) has said that neither any damage should be done nor any suffered. It is

argued that inflation causes damage to the purchasing power of money and that indexation is a means to redress that damage.

In order to consider this argument, we shall have to examine how the Islamic law of indemnity may be applied in context of indexation. The law provides that a person responsible for inflicting a damage should indemnify the sufferer. In order to determine as to who should bear the burden of indemnity, it would be necessary to be sure as to which out of a multitude of factors is responsible for inflation. In case trade unions are responsible for a cost-push inflation, how will it be justified to make the entrepreneur indemnify the fall in the value of its loaned money? Will it not be a double punishment to the entrepreneur that he would pay higher wages to the labour and then a higher cost of the loan to the bank? Why should a borrower be made to pay for a fall in value of money that occurs due to demand-pull inflation caused by the receivers of foreign remittances or the recipients of high salaries and those charging exorbitant profits? In some countries indexation is limited to government bonds. This means that the government indemnifies only the bond holders. The question would arise as to who should bear the burden of indemnifying the bond-holders. The public treasury is mostly financed by taxes. In other words, it is the entire society which indemnifies the bond holder alone although everybody in the society suffers equally from the rampant inflation.

(3) It may also be advocated that since the government is the guardian of the interest of the people (*al-walī al-'āmm*), it may indemnify the people for their loss in the purchasing power of money whether or not it is responsible for it. In this respect the guidng principle is that a damage is to be redressed.

The answer to this plea is that the rule is applied only when one is sure that a damage will not be replaced by a bigger damage or a similar damage. Another condition is that a mild damage will be endured in order to get rid of a serious damage. The third condition is that a particular damage may be tolerated to redress a general damage. Contrary to that, it has been observed that indexation is a mechanism which is extremely complicated to devise and operate and is a recipe for built-in inflation. The question is: are we willing to have recourse to a more complicated mechanism in place of a simple routine without expecting any check on inflation? There is no doubt that monetary expansion brought about by rising public expenditure through deficit financing is considered to be a policy that causes inflation even if no other factors responsible for this situation are combined. It may be asked, however, why should the government resort to monetary expansion? The answer is that the government does so for the overall development of the community, the country and the posterity. Confining the government expenditure to regular budget and disregarding the major development programmes involving huge expenditure can save the people from the hardships of inflation. But at what cost? In the present day world, at the cost of economic and political independence. This means protection from a minor damage at the cost of a serious damage to the community. Moreover development programmes and defence preparations may be withdrawn in favour of the purchasing power of the present generation but this may be done only at the expense of political independence and economic prosperity. Thus a particular damage will be avoided by exposing the country to a general damage.

(4) Another argument that may be adduced in support of indexation is that during inflation wages increase under the pressure of trade unions. If such an increase is

permitted by the *Sharī'ah* on the ground of increase in prices, then how can indexation be treated as unjustified. This is a fallacious analogy because, according to the *Sharī'ah*, return on service is governed by a different rule than loan. Any increase in the return on service leads to increase in remuneration while increase in the amount of loan is prohibited and declared by the Prophet (peace be upon him) to be interest.

The following further points lead to the rejection of the idea of indexation on rational grounds:

(a) The value of money is a relative concept. It does not represent the intrinsic characteristics of money which are its ability to serve as a medium of exchange and a unit of account. During inflation it is the relative characteristic — future value in terms of exchange — that is affected. This latter characteristic has never remained constant ever since the day money was introduced. This has been so even when full-bodied money was in circulation. Now the question is, has any weakness crept in the money itself that has reduced its purchasing power? Or is there something wrong with the seller of the commodity who claims more money for the same commodity? It is surely the latter factor that is responsible for increase in price because the supply of goods and services does not match the existing quantity of money. The intrinsic characteristics of money are intact. The fact that the rate of increase in prices is not generally identical also suggests that the defect does not lie in money; it is the difference in demand for, or supply of, different goods and services that causes this distortion.

(b) The basic purpose behind indexation is to indemnify the owner/creditor for the loss incurred in the future purchasing power of money. And this future is not the moment when a loan is redeemed; it begins from that

moment. Thus it is not only the purchasing power of money that should be guaranteed but also the prospective potential of money that should be ensured. This, obviously, is a condition impossible to follow. This means that indexation alone will always fail to meet the essential criteria of justice.

(c) Another aspect of this injustice is the choice of index itself which represents the basket of consumer goods and their weights that are included in price index. The index of prices represents the consumption habit of an 'average person', which does not represent the overwhelming majority of actual persons. This will be unjust for many, and an unjustifiable favour for others. Moreover, the basket will either represent the expenditure as it obtains in the whole country/region, or a fresh basket will have to be devised for each locality representing a different mode of living, price structure, substitutions, traditions, habits and such other factors. Another distinction will have to be made classwise.

Since a single basket represents the expenditure in the whole country it will become unjust. If consideration is given to different classes and income groups, it will become too unwieldy to adopt.

(d) Apart from this spatial injustice, the index also involves temporal injustice. Index can be made on the basis of prices on some particular date or on the basis of average prices during a particular period, once, twice, thrice or four times a year. Unlike it savings, lendings and redemptions are an everyday business. Thus average prices will never be precisely factual and fair.

(e) Another aspect of injustice of the index lies in its macro-approach. It can be accepted that the loss in the purchasing power of money should be made up. But the question is: for whom? It is the savers individually, not collectively, whose purchasing power is to be made up.

The question then arises: Is the loss in purchasing power of all the individual savers according to the consumer basket which is the index? It will be found that nobody saves for the purchase of index-basket. Hence, linking anybody's savings to any sort of basket will be unrealistic and unjust. If the loss in the purchasing power is really to be compensated for, it should be done in proportion to the loss suffered by the individual savers. But this is impossible. Compensating for the loss in the purchasing power of money is a micro-economic phenomenon. Dealing with it on the macro-level will always be unjust.

(f) In addition to all these injustices, the basic point is that it is not the act of lending that erodes the purchasing power of money; it is the act of saving that is responsible for decline in its value whether or not it is advanced as a loan. As such, to extract compensation for this loss from the borrower is altogether unjust.

(g) Stability in prices is an ideal. It can be achieved and maintained in a primitive, stationary society for a very long period, but in a dynamic society, for a very short period. Stable prices in the face of fast changing habits, modes of production, consumption patterns, standards of living, inventions and defence technology are an inaccessible ideal.

(h) While arguing for indexation the entire discussion seems to assume a permanent inflationary situation in the future. Wisdom would demand for also assuming the impact of indexation during deflation. If indexation is applied during high rate of deflation or during recession the ruin that its psychological reaction will bring about can be easily perceived.

(i) Indexation is prescribed by some economists to remedy the two failings of money viz. as a store of value and as a standard of deferred payment which are caused by

inflation. But the interesting point is that by this remedy money loses one more characteristic viz. being a measure of value, without restoring its lost characteristics.

(j) There is also an argument which rejects the odium that has been attached to inflation. According to this argument, the protest against inflation is by and large a psychological reaction because the rate of increase in the savings of the people is not commensurate with the rate of increase in incomes due to the simultaneous increase in the rate of expenditure on ever-increasing consumer items. The argument rejects over-emphasis on the need for maintaining price stability at all costs which, in the *Sharī'ah*, is not an end itself but is intended to achieve some other object. The argument relies upon Schultz's sectoral demand shift theory which forms a basis to conclude that price stability in the developing countries is a far-fetched idea.

(k) Since most of the interest-free loans are non-productive, compensation will be unjustifiable from the borrowers' point of view.

(l) In case the rate of inflation is higher than the rate of profits, it will discourage the banks from accepting loan accounts and advancing funds on equity basis.

(m) Indexation by banks would have serious repercussions on voluntary private lending in an Islamic society. If individuals are also tempted to adopt this scheme, it will open the floodgates to interest.

(n) It is also claimed that indexation would bring about confusion in the entire currency system by attributing different values to the same money according to its repository. Thus the same money in imprest, in bank, and in business will have three different values. During inflation, the value of money in imprest will continue to

fall; the value of money in business will depend on its productivity; and the value of money in the bank which is advanced as indexed loan, will remain constant. This will take away the basic characteristic of money which makes it a unit of account.

(o) In indexation the index-basket, as known and practiced at the present, determines the standard of settlement of money debts in the future. In Islamic law it is *māl* that may be lent and borrowed and that is the standard of deferred payment. It is the quantity of this *māl* that is contracted to be returned. *Māl* has a value and has a demand. Basket of commodities is an accounting concept. It has no value because it has neither want nor is demanded, nor supplied. Thus it is doubtful if determining this basket as a standard of value in future payments would be acceptable in Islamic law.

There is no doubt that if inflation is allowed to grow beyond a reasonable limit, this may dry up investment in public utilities and encourage hoarding and speculation by discouraging interest in socially desirable channels. It may also lead to flight of domestic capital. It may even cause a decline in the overall real income in the economy. It may adversely affect the distribution of real incomes in different groups of the society mainly to the detriment of the fixed income groups. All these factors create a situation that is not desirable in Islam. There should a means of redressing these evils and indexation is claimed to be one such technique. But an evil, as already discussed above, should not be redressed by a similar or a bigger evil. Muslim economists should try to explore the ways of fighting inflation within the framework provided by the *Sharī'ah*. If Chile, for example, can succeed in devising a non-monetarist formula for fighting inflation there is no reason why Muslim economists should insist on a device which, apart from violating the rules of the *Sharī'ah*, has failed to cure the evils of inflation.

EXCURSUS I

SINDH HIGH COURT JUDGMENT

As we have pointed out in the 'Preface', a learned judge of the High Court of Sindh issued in 1989 a decree to index a financial liability in terms of purchasing power of money that was advanced to a Finance Company a few years ago. This 33-page document touches upon delicate constitutional and legal issues and religious injunctions to disallow the payment of interest on deposits and grants relief to the depositor by way of compensation for a fall in real value of money that had occurred during the period of deposit. Since constitutional matters are beyond the scope of the book, we shall confine ourselves to reproducing the relevant sections of the judgement relating to indexation. This will be followed by an examination of the main points of the judgement.

Para 59. "It is manifest that grant of interest is prohibited directly under the injunctions of Qur'ān itself. However, a modern society is beset with the evils or ill effects of the prevalence of an economic order where paper currency happens to be in vogue and holds the field as correct legal tender. This has given rise to violent changes in the value of such legal tender and a common ailment of such a monetary system is its being constantly subject to what has been termed by economists as "inflation" or erosion in the buying power of the paper currency from time to time and, on occasions, also "deflation", as was

experienced during the great depression of the thirties. Question, therefore, arises whether, in such circumstances, a borrower or for that matter, a purchaser in a sale, subject to deferred payment, is liable to return or pay only that count in terms of the paper currency which he borrowed or agreed to pay when such a deferred payment, as aforesaid, fell due. It would be appropriate now to quote Verse 7, *Sūrah Āl-'Imrān*, relating to the interpretation of the Holy Qur'ān which ordains:

> For its (Qur'ān's) hidden meanings, but no one knows its hidden meanings except Allah and those who are firmly rooted in knowledge ....

To Hazrat 'Alī, as reproduced in *Nahj al- Balāghah*, (Khutbah 194, page 248), is attributed the under-noted golden saying:

> Our philosophy and our preaching could only be understood by superior minds and sincere hearts.

Guided by the quoted verse in *Sūrah Āl-'Imrān* and the dictum of Ḥazrat 'Alī above-mentioned, it humbly appears to me that while a borrower or a purchaser, as aforementioned, cannot be forced to return anything more than the amount due, he may not, at the same time and by the same token, be permitted to pay anything less than that which he, in the first instance, borrowed or agreed to pay. There is authority, dating back from the days of our earliest Doctors, to the fact that where a contract of sale is concluded but payment is deferred and, subsequently, the legal tender loses its value, wholly or in part, the buyer is obliged, according to preponderance of view,to pay on the date, when payment becomes due, such amount, in terms of the current legal tender or in terms of gold and silver, which is equivalent to the real worth of the currency, which was the subject-matter of or for which the contract was concluded.[1] Similar principle is applicable in relation to loans. Thus, if a person had borrowed money at a time when the value of money was at a particular level, in terms of purchasing power, and that value, discernibly diminished at the time of return, the borrower is liable to pay at least the equivalent of the real worth of the currency loaned out

to him. In this behalf reference is made and reliance is placed on *Tanbīh al-Ruqūd 'alā Masā'il al-Nuqūd* by Muḥammad Amīn ibn 'Ābidīn al-Shāmī, compiled in 1230 A.H. (see pp.58-68 of *Majmū'ah Rasā'il ibn 'Ābidīn*, vol. II. Reprint Lahore, 1976).

Para 61. "Viewed in the foregoing light it is obvious that in their official pronouncements the Federal Government of Pakistan and its various agencies and the State Bank of Pakistan have neither been wanting nor slow in acknowledging, officially, in instruments, as sacrosanct as budgetary provisions and official publications, that inflation is rampant in the country. All efforts to keep it in check and to maintain the intrinsic value of the rupee have failed. Thus what was borrowed some years back if it is ordered to be returned on the basis of the same count would result in manifest injustice to the creditors in as much as that which will thus be returned would not have the same intrinsic value and buying power as it possessed, at the time of grant of loan.

"The Law of Allah does not brook injustice of any kind and, therefore, whenever a case for payment, for refund or return of money, comes before a Court of Law in Pakistan, it has to be the endeavour of that Court to order the payment, refund or return, as the case may be, of so much of current legal tender to the person entitled as is equal, in terms of buying power or other intrinsic value, to the amount initially loaned out, contracted to be paid, or deposited."

Para 63. "This brings me to the crucial question as to how equity is to be done between the parties. For obvious reasons no rule of thumb is available to determine the extent of erosion, which the principal sum due, and earlier decreed in this case, has suffered till the date of payment, if any, or the decree. Such matter as a rule involves application of detailed accounting procedures based on official data on the subject. Simple decree on the basis of the afore-quoted statistics may not do. The case, therefore, in principle, calls for a preliminary Decree, if one can be passed under law. This, however, does not imply that where

smaller amounts or periods are involved a given case cannot be disposed of on approximations."

Para 65. "I would, therefore, grant in this case to the plaintiff a decree of a Preliminary nature for assessment as to what was the *equivalent real worth of the money which was initially borrowed*, that is to say, of the sum of Rs.5,00,000 as payable on 20.05.1984, the amount and date reflected, as they are, in the Promissory Note in suit. For this purpose and in order to make accurate assessment I would appoint a Commissioner to do the needful and for that purpose the Commissioner would be entitled to seek assistance from the relevant functionaries of the State Bank of Pakistan ...."[2]

SUMMARY OF THE MAIN POINTS OF THE TREATISE

The paragraphs reproduced above adduce a Qur'ānic verse, a saying by Pious 'Alī (Allah be pleased with him) and reference to a booklet written by a celebrated jurist of 13th Hijra century, generally known as Ibn 'Ābidīn al-Shāmī.

Before examining the *Sharī'āh* interpretation of the above passages from the standpoint of the *Sharī'āh* it would be worthwhile to reproduce a summary of the points discussed in the treatise written by Ibn 'Ābidīn as referred to in the Decree. The treatise discusses the liability of payment under situations of demonetization, debasement, fluctuation in value of the coin, monometallism and bimetallism and reproduces the opinions of the earlier scholars on the question under discussion some of which have already been mentioned by us earlier (chapter 3).

THE CASE OF DEMONETIZATION

Ibn 'Ābidīn is of the opinion that if a person purchases something for the money which, before making payment, is replaced would have either of two effects:

(1) In case this money is not in circulation the contract would be voidable. The reason is that in a contract of

sale both nature and amount of goods and money should be specified undisputably. In the event of destruction of goods before they are delivered or of money before it is paid the contract of sale will become ineffective. Thus in the event of non-circulation of the contracted unit of money the contract of sale would become voidable because of the destruction of money.[3]

(2) In case this money is in circulation but its value has depreciated the contract will not be invalid because money has not suffered destruction. As a result, the seller will have to accept the same money.

According to Zāhidī, if a person sells something for a specific amount of money in circulation but afterwards that money is demonetized the contract of sale will become invalid. Therefore the purchaser shall return the goods if they are intact. But in case the goods are consumed or transformed into a different form he will return the like of the if the goods are fungible or, if otherwise, the price of the goods in terms of current money equivalent to the value of money that prevailed on the day the goods were delivered to him.

The above legal opinion pertains to trading. In case it is a contract of hire, the contract would become invalid and the hirer will have to pay standard rent (*ajr mithl*).

In case of loan or dower the liable party shall pay the like of the amount payable.

The above is the opinion of Imām Abū Ḥanīfah. According to Abū Yūsuf the liable party shall pay equivalent value in terms of other currency as circulating on the day of the contract. According to *Hidāyah*, the sale of *dirhams* which are debased and later on demonetized and thus become out of circulation, is void according to Abū Ḥanīfah. But according to Abū Yūsuf, the purchaser shall be liable to pay the value that prevailed on the day of the sale whereas according to

Muhammad he shall pay the equivalent of the value of the debased money in terms of the current money.

THE CASE OF *FULŪS*

According to *Sharḥ Taḥāwī* this is consensus that in case the *fulūs* are not demonetized, but their value increase or decreases the borrower will be liable to return the exact sum borrowed by him.

THE CASE OF BIMETALLIC STANDARD

Presently (early thirteenth century) we have a multi-currency system in which the different currencies are equivalent in value and acceptability. As a result the purchaser has the option to pay in any currency of his choice. Along with it official decrees sometime devalue one of these currencies. This is a situation in which the legal opinion has been divided. it was ultimately decided that if the unit of currency was specified in the contract, it would be payable as such. In case the unit of currency was not specified then the purchase would pay the equivalent value of currency that he would choose. This opinion is adopted with a view to protect the buyer and the seller from the loss arising out of arbitrary discretion of either party in view of revaluation or devaluation of the currency.

EXAMINATION OF ARGUMENTS

The Decree, in making out the case for "paying the purchasing power of the amount of loan", claims to have been guided by the Qur'ānic verse 3:7 which is reproduced below:

'He it is Who hath revealed unto thee the scripture wherein are clear revelations — they are the substance of the book — and others which are allegorical (متشابهات). But those in whose hearts is doubt pursue, forsooth that which is allegorical seeking to explain it. None knoweth its explanation save Allah. And those who are of sound instruction say: We believe therein; the whole is from our Lord; but only men of

understanding really heed'.(English rendering: Marmaduke Pickthall).

It is not clear in what way the above quoted verse provides any argument in support of the decree. It may be submitted that the verses 2:278-79 deal directly with the subject and support the argument contained in the decree that "while a borrower or a purchaser cannot be forced to return anything more than the amount due, he may not, at the same time and by the same token, be permitted to pay anything less than that which he, in the first instance, borrowed or agreed to pay". The verses are:

> O ye who believe! Observe your duty to Allah, and give up what remaineth (due to you) from interest. if ye are (in truth) believers. And if ye do not, then be warned of war from Allah and His Messenger. and if ye repent, then ye have your principal (without interest). So wrong not and ye shall not be wronged." (2:278-79)

The emphasis placed in the decree on protecting the interest of both parties and restraining them from doing injustice is admirable but, as we have argued earlier, the indexation of financial liabilities in itself is fraught with injustice.

The Decree places reliance on Ibn 'Ābidīn al-Shāmī's treatise but does not quote the passage which guides it to infer that it supports indexation. A summary of the relevant portions of the treatise has been reproduced above. It will be noted that the early thirteenth *Hijrah* century work is a good compilation of earlier opinions on discharge of financial liabilities under situations of demonetization, debasement, official devaluation of one monetary unit in relation to another unit circulating within a country, of counterfeit money, and money not treated to be legal tender (*fulūs*). The point to note is that the opinions of early *fuqahā'*, as quoted by Ibn 'Ābidīn, though applied to an entirely different monetary set up, disfavour the concept of indexation.

EXCURSUS II

A NOTE ON THE CHILEAN EXAMPLE

There is no denying the fact that if inflation is allowed to grow beyond a reasonable limit, this may dry up investment in public utilities; encourage hoarding and speculation by discouraging interest in socially desirable channels. It may lead to flight of domestic capital. It may cause a decline in the overall real income in the economy. It may adversely affect the distribution of real income in different groups of the society mainly to the detriment of the fixed income groups. All these factors create a situation that is not desirable in any economy. There should be means of redressing these evils.

But an evil, as already discussed above, should not be redressed by a similar or a bigger evil. Muslim economists should try to explore the way of fighting inflation within the sanctions provided by the *Sharī'ah*. If Chile, for example, can succeed in devising a non-monetarist formula for fighting inflation there is no reason why our economists should insist on a device that, apart from violating the rules of the *Sharī'ah*, has failed to fight inflation.

In Chile, the rate of inflation in 1973 was as high as 400% (or 1000 percent as recorded by some observers) which rose to 600% in 1974. In 1975 the government took measures to

control it by reducing public expenditures by 28 percent, and the budget deficit as percentage of G.D.P. dropped from 24 percent to 3 percent. This shock treatment also included replacing the debased escudo by a new peso. By means of this measure Chile has managed to fight inflation and yet achieve significant real economic growth, increase capital investment, reduce unemployment and expand exports. Over the last five years real growth of gross domestic product has averaged 7.3 percent annually, a figure which ranks Chile among the most rapidly growing countries of the world. The growth has been spread fairly evenly among the major sectors of the economy. Gross investment which averaged about 14 percent of G.D.P. in 1975-76, was close to 19 percent of a much expanded G.D.P. in 1981. Unemployment problem has been substantially alleviated. Real wages have increased on the average by 7.7 percent annually since 1977. Dramatic export growth has also been stimulated by Chile's anti-inflation policies.

The guts of the anti-inflation programme in Chile have been the interaction of two key policies.

First, the authorities severely curtailed government spending since budgetary deficits had been a constant cause of Chile's inability to fight inflation successfully. Among other things, social programmes were reorganized so that they focussed on the most needy, and some services were privatised. Even the defence budget was reduced. The state enterprises were required to adhere to stricter profitability standards. The expansion of economy and the profits earned by the state mining companies resulted in the growth of tax revenues and elimination of budget deficits, despite minor tax reductions in 1980. The government is developing proposals to curtail further the scope of the public sector through additional privatization.

The second key policy move—to open the economy to world market forces—has taken some time to implement but is now virtually completed. It was necessary, first of all, to make frequent adjustments in the exchange rate when Chile's inflation

rate was running well above that of the major industrialized countries. Since June, 1979, the peso has been pegged to the U.S. dollar.

On the trade front imports were liberalized to force Chilean industry and agriculture to measure upto world competitive standards. It also has had a strong dampening effect on prices. Despite some initial mishaps and set-backs the adjustment was made so that the industrial production has now reached encouraging record levels. Overall, as a result of these two policies—holding the public sector in balance and opening the economy to world market forces—the consumer price index has come down from 40 per cent to 11 per cent in two years. Since there is no creation of money from the central bank, the heavy expenditure on imports—both investment and consumer goods—have drained liquidity from the domestic economy, forcing up interest rates.

(The above excursus has been abstracted from Robert N. Bee, "How Chile has fought Inflation", *The Banker*, London, November, 1981).

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2. *Ibid.*, 5.
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4. See Alfred Marshall, *Official Papers*, ed. J. M. Keynes (Cambridge, 1926), pp. 7 ff. See his answer to the question 8 on currency and prices.
5. David Finch, "Purchasing Power Guarantee for Deferred Payments", *I.M.F. Staff Papers*, vol. 1, February 1956, p. 2.
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13. Milton Friedman, "Can Indexation Cut Inflation's Toll", *op. cit.*, p. 76.

14. *Ibid.*, p. 96.

15. "The Grass is Greener", *op. cit.*, p. 94.

16. Page and Trollope, "An International Survey", *op. cit.*, p. 49.

17. "The Grass is Greener, *op. cit.*, p. 94.

18. "Indexing Examined", *op. cit.*, p. 205; Page and Trollope, "An International Survey", *op. cit.*, p. 50.

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21. "Indexing Examined", *op. cit.*, p. 205.

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25. *Loc. cit.*

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16. *Loc. cit.*

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25. William Fellner, *et al* "Shock Therapy or Gradualism? A Comparative Approach to anti-Inflationary Policies", *Group of Thirty Occasional Papers* (New York, 1981), pp. 23-24.

26. This observation is confirmed by different observers. (See, for example, Guenther, "Indexation versus Discretionary Action", *op. cit.*, p. 29; Page and Trollope, "An International Survey", *op. cit.*, pp. 48-49 and c.

27. According to Marshall, the task of publishing from time to time the currency value of a constant purchasing power cannot be performed properly except by a permanent government department (*Official Papers*, *op. cit.*, p. 11).

28. Suzuki, "Indexation in Brazil", *op. cit.*, p. 5.

29. Baer and Beckerman, "Indexing in Brazil", *op. cit.*, p. 46.

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31. For example in Israel. See Rubner, "The Abdication", *op. cit.*, pp. 74-75.

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34. Randal Hinshaw, "Stagflation", *op. cit.*, p. 12.

35. Page and Trollope, "An International Survey", *op. cit.*, p. 52.

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THREE

1. This is narrated from the Prophet (peace be upon him). See Muhammad b.Yazīd ibn Mājah, *Sunan*, *Kitāb al-Aḥkām*, *Bāb "Man banā fī Ḥaqqihi ...."*

3. While fixing a minimum, the government will have to take into consideration the cost of living of the group whose salary/wage is to be determined. This implies change in the minimum as a result of change in prices.

4. This is considered to be one of the question on which there *is ijmā'*.

5. Ibn Qudāmah, *al-Mughnī*, vol. 4 (Cairo: Dār al-Manār, 1367 A.H.), p. 318; Saḥnūn, *al-Mudawwanah al-Kubrā*, vol. 8 (Cairo 1323 A.H.), pp. 131-32.

6. Some *fuqahā'* observe that in the first century of Islam there was consensus on the prohibition of increase in such transactions and that any decree granted by any court of law violating this prohibition is null and void. (See al-Sarakhsī, *al-Mabsūṭ*, vol.14, p.6).

7. 'Abd al-Raḥmān al-Jazīrī, *Kitāb al-Fiqh 'alā al-Madhāhib al-Arba'ah*, fifth edition, Maktabah al-Tijāriyyah al-Kubrā, Cairo, n.d., vol. 2, pp. 339-343.

8. Ibn Qudāmah, *al-Mughnī*, *op. cit.*, vol. 4, p. 48.

9. *Loc. cit.*

10. *Ibid.*, vol. 4, p. 325.

11. *Al-Fatāwā al-Hindiyyah* compiled by Shaykh Niẓām, and *al-Fatāwā Bazzāziyyah* on the margins (Quetta, 1983), vol. 4, p. 412.

12. *Majallat Aḥkām al-'Adliyyah*, (Karachi, n.d.), Section 900.

13. Ibn Qudāmah, *al-Mughnī*, vol. 5, *op. cit.*, pp. 221-22.

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16. *Al-Fatāwah al-Hindiyyah*, *op. cit.*, vol. 1, p. 310.

17. *Loc. cit.*

FOUR

1. See "Preface" and "Introduction". For an example of the latter case see S.N.H. Naqvi, *An Agenda for Islamic Economic Reform*, Islamabad, 1980.

2. K.T. Hossain, "Running an Economy without *Ribā*" in *Thoughts on Islamic Economics* (Dhaka, 1980), p.156. The question of the religious position of linking government borrowing to nominal growth rate in the economy of Pakistan was also raised by the Finance Minister of Pakistan in his Budget Speech of 1984-85.

3. M. Afzal, "Islamic Banking in non-Muslim Societies" in *Outlines of Islamic Economics* (Indianapolis, 1977), p.123.

4. Sultan Abu Ali in Mohammad Ariff (ed.), *Monetary and Fiscal Economics of Islam* (Jeddah, 1482 A.H.), p. 177.

5. Laliwala in Ariff, *Monetary and Fiscal Economics of Islam*, *op. cit.*, p. 177.

6. Umer Zubeir in Ariff, *Monetary and Fiscal Economics of Islam*, *op. cit.*, p. 177.

7. Monzer Kahf in Ariff, *Monetary and Fiscal Economics of Islam*, *op. cit.*, p. 178.

8. Munawar Iqbal, "Inflation, Indexation and the Role of Money" (typescript), p. 32; Ḥammād, p. 77. Those who are reluctant to support indexation also favour the application of *ijtihād* on ground that it is a new phenomenon. (See Ziauddin Ahmad, "Comments" on Munawar Iqbal's paper presented to the Workshop on the *Sharī'ah*-Position on Indexation, 1987, Jeddah, (typescript), p. 9).

9. S.N.H.Naqvi, *An Agenda for Islamic Economic Reform*, *op. cit.*, p. 23.

10. *Report of the Council of Islamic Ideology on the Elimination of Interest*, *op. cit.*, p. 12.

11. Munawar Iqbal, "Inflation, Indexation and the Role of Money" (typescript) paper presented to the Workshop on the *Sharī'ah*-Position on Indexation sponsored by IRTI and IIIE at Jeddah in 1987, p. 32; Ḥammād, "*Taghayyur al-Nuqūd wa Atharuhu 'alā al-Duyūn*", in *Majallat al-Baḥth al-'Ilmí*, Jeddah, 1400 A.H., p. 77. Those who are reluctant to support indexation also favour the exercise of *ijtihād* on ground that it is a new phenomenon. See Ziauddin Ahmad's "Comments" on Munawar Iqbal's paper presented at the Workshop on the *Sharī'ah* - Position on Indexation", Jeddah, 1987, (typescript), p. 9.

12. Munawar Iqbal, "Inflation, Indexation and the Role of Money", *op. cit.*, p. 13.

13. Salim Chishti, "The Case for an Indexed Financial Instrument in an Interest-Free Economy", (typescript), p. 19.

14. Munawar Iqbal, "Inflation, Indexation and the Role of Money", *op. cit.*, p. 14.

15. Ḥammād, *op. cit.*, pp. 68-76.

16. Salim Chishti, *op. cit.*, p. 14.

17. Mohammad Abdul Mannan, "Indexation in an Islamic Economy", *The Journal of Development Studies*, Peshawar, 1981 pp. 45-46; Rafiq al-Maṣrī, *al-Islām wa al-Nuqūd*, (mimeograph), Centre for Research in Islamic Economics, Jeddah, 1981, p. 91.

18. Mohammad Abdul Mannan, "Indexation", *op. cit.* pp. 46-47; Rafīq al-Maṣrī, *op. cit.*, 91.

19. Salim Chishti, "Case", *op. cit.*, p. 9; Abdul Mannan, "Indexation", *op. cit.*, pp. 46-47.

20. Salim Chishti, "Case", *op. cit.*, pp. 17,19; Munawar Iqbal, "Inflation Indexation", *op. cit.*, pp. 35,42; Mannan, "Indexation", *op. cit.*, p. 45; Rafīq al-Maṣrī, op. cit., 92.

21. Nawab Haider Naqvi, *Principles of Islamic Economic Reform*, Islamabad, 1984, pp. 41-42.

22. S. M. Hasanuz Zaman, *Survey of Islamic Literature on Indexation* (typescript), paper presented to the Workshop on the *Sharī'ah* - Position on Indexation, Jeddah, 1987, pp. 9-10.

23. S. M. Hasanuz Zaman, "Indexation — An Islamic Evaluation", *Journal of Research on Islamic Economics*, vol. 2, No. 2, pp. 48-50.

24. Sālūs, p. 2; n. 52; Chapra, *op. cit.*, pp. 15-16.

25. S. M. Hasanuz Zaman, "Indexation", *op. cit.*, p. 52.

26. Chapra, *op. cit.*, p. 39.

27. S.M. Hasanuz Zaman, *Survey*, *op. cit.*, p. 15.

28. S.M. Hasanuz Zaman, *Survey*, *op. cit.*, p. 15. Fahim Khan in "Notes for Workshop on *Sharī'ah*-Position on Indexation and its Applicability to Islamic Economy", (pp.7 ff.) has summed up most of the above-mentioned arguments against indexation.

29. Salim Chishti, "Case", *op. cit.*, p. 15; S. M. Hasanuz Zaman, *Survey*, p. 12. Shawqī Dunyā explains the situation in philosophical terms. For him it is not due to spatial change that has reduced the purchasing power of money; it is a temporal change that is responsible for it. (See Shawqī Aḥmad Dunyā, *Taqallubāt al-Quwwah al-Shirā'iyyah li al-Nuqūd*, paper circulated in the Workshop on Indexation, Jeddah, 1987, p. 67.

30. M. Nejatullah Siddiqi, *Issues in Islamic Banking* (Leicester, 1983), p. 17.

31. 'Ālī Aḥmad Sālūs, *Taghayyur Qīmat al-Nuqūd*, (mimeograph) circulated in the Workshop on Indexation, Jeddah, 1987, p. 2; M. Hasanuz Zaman, "Indexation", *op. cit.*, pp. 40 f. and *Survey*, *op. cit.*, pp. 27-28. It may be recorded here that religious scholars such as Ḥusayn Ḥāmid Ḥassān, Ṣiddīq al-Ḍarīr, Mawlānā Muḥammad Taqī 'Uthmānī and 'Abd Allāh ibn Sulaymān ibn Manī', in their discussions in the Workshop, also claimed that linking loans to any commodity or basket of commodities or to a numerator like Fixval Units proposed in the Workshop by Munawar Iqbal was unlawful in the light of clear texts and the unanimous opinion of the early *fuqahā'*.

32. See Ṣiddīq al-Ḍarīr, "The Position of *Sharī'ah* on Indexation", (typescript), p. 21; see also Sālūs, paper presented in the Workshop on Indexation at Jeddah, 1987, *op. cit.*, p. 2.

33. Chapra, *op. cit.*, "Comments", p. 17.

34. S. M. Hasanuz Zaman, *Survey*, *op. cit.*, pp. 11-12.

35. M. Nejatullah Siddiqi, *Issues*, *op. cit.*, p. 44.

36. *Loc. cit.*

37. S. M. Hasanuz Zaman, *Survey*, *op. cit.*, pp. 20-21.

38. S. M. Hasanuz Zaman, *Survey*, *op. cit.*, pp. 18-19. 'Abd Allāh ibn Sulaymān ibn Manī' confines money to a single function viz. medium of exchange. (See *al-Waraq al-Naqdī*, *op. cit.*, p. 19). It is interesting to note that the author has quoted al-Ghazzālī's opinion claiming that money is anything upon which an agreement to pay in exchange is reached is money (*naqd*) even though it be a piece of stone or wood. *Ibid.*, p. 21.

39. S. M. Hasanuz Zaman, *Survey*, *op. cit.*, p. 31.

40. S. M. Hasanuz Zaman, *Survey*, *op. cit.*, p. 31. Until the first half of this century it was a controversial matter.

* For details of the controversy, see Mawlānā Muḥammad Taqī 'Uthmānī, *Ahkām Awrāq al-Nuqūd wa al-'Umūlāt*, paper presented in the Workshop on Indexation, Jeddah, 1987, and 'Abd Allāh ibn Sulaymān ibn Manī', *op. cit.*

41. *Cf.* Ḥammād, pp. 68-76. The theory, though upheld by a large number of early *fuqahā'* and scholars, is rejected by 'Abd Allāh ibn Sulaymān ibn al-Manī', *op. cit.*, p.21.

42. For details of 'Abd Allāh ibn Sulaymān ibn al-Manī', pp. 71-76.

43. *Loc. cit.*

44. *Cf.* Mawlānā Muḥammad Taqī 'Uthmānī, *op. cit.*, pp.12-14.

45. 'Abd Allāh ibn Sulaymān ibn Manī', *op. cit.*, p. 21.

46. Rafīq al Maṣrī, *op. cit.*, p. 92; Abdul Mannan, "Indexation", op. cit., p. 45.

47. Hasanuz-Zaman, *Survey*, op. cit., pp. 29-30. *Cf.* *Dā'irah-ī Ma'ārif-i Islāmiyyah*, (Lahore, 1975), vol. 15, s.v. *"Fals"*. See also *Encyclopaedia of Islam*, II edition, vol. 2, art *"Fals"*.

48. *Loc. cit.*

49. Gist of observations made by Ḥusayn Ḥamid Ḥassān, Mawlānā Muḥammad Taqī 'Uthmānī, Ṣiddīq al-Ḍarīr and others in the Workshop on Indexation, Jeddah, April 27, 1987.

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1. *Passim.*

2. Ibn Mājah, *Sunan*, vol. 2, (Cairo, Matba Tazia, Ist print n.d.), p. 57.

3. Ibn Nujaym, *al-Ashbāh waal-Naẓā'ir*, (Cairo, Maẓharī, n.d.), pp. 58 *f.*

4. *Ibid.*, pp. 58, *ff*.

5. *Ibid.*, pp. 10, 23-24 and 34.

6. For a refined technical discussion the see Charles. L. Schultz's "sectoral demand shift" theory in "Recent Inflation in the U.S." (Study Paper No. 1 for Joint Economic Committee, Study of Employment, Growth and Price Levels, Washington D.C., 1959). The theory, rejecting both demand pull and cost push theories, tries to explain the general rise in prices in a developing country in terms of continual shifts in demand from sector to sector. Such shifts raise prices in the sectors towards which demand shifts without a corresponding reduction in prices in the sectors from which demand shifts away.

EXCURSUS I

1. The remark seems to refer to the case involving the payment of *fulūs* or any currency that is not a legal tender.

2. *PLD* 1989, vol. XLI, pp. 334-336, Aijaz Haroon versus Inam Durrani, decreed by Mr. Justice Wajihuddin Ahmad, Sind High Court. (Only relevant portions have been reproduced).

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The rapidly decreasing value of currency all over the world in general, and in the Third World in particular, has acquired an unprecedented proportion. During the past decades, indexation has been suggested as a solution to the problem of inflation in many countries of the world.

Islamic scholars have generally been opposed to indexation of financial loans. Arguments and counter-arguments have been put forth on the subject, requiring a deeper study by the scholars who combine knowledge of Economics with that of Islamic Studies, especially Islamic *Fiqh*. In the present work Dr. S. M. Hasanuz Zaman, a renowned Islamic economist, presents a clear and thorough study of the problem of indexation. Dr. Zaman has made a critical survey of the experiment of indexation in different parts of the world. He has examined the question of indexation from an economic point of view along with evaluating it from the viewpoint of Islamic *Fiqh*. He has discussed the arguments advanced in favour as well as against indexation, and has concluded that indexation is neither economically beneficial, nor rationally justified, nor Islamically acceptable.

Dr. S. M. Hasanuz Zaman, an internationally renowned Islamic economist, holds a Ph.D. from Edinburgh University as well as M.A. in Economics and Islamic Studies from the Universities of Agra and Karachi. Dr. Zaman has for long been head of research in Islamic Economics in the the State Bank of Pakistan. Dr. Zaman has also been a member of the Council of Islamic Ideology (1987-1989), and a member of the Panel of Economists and Bankers set up by the Council of Islamic Ideology (1977-1981).

His published works include *Economic Functions of an Islamic State — the Early Experience*, (Leicester, The Islamic Foundation, 1991). Dr. Zaman has published a score of papers in reputed academic journals on a wide variety of economic subjects.